

Minister to Their Instruction: Revisiting the Minister- Vaccinator Rowland Hill

Joshua T.B. Williams, MD,^{a,b} Abraham M. Nussbaum, MD, MTS^{c,d}

Science and religion have intersected throughout history, occasionally at the tip of a lancet. Major religions espouse principles and revere sacred texts whose themes support vaccination, but religious vaccine exemptions are widely available and vaccine-preventable diseases infect religious communities at regular intervals.^{1,2} Particularly contestable intersections have been memorialized in accounts such as *Bad Faith*, *Child Fatalities From Religion-motivated Medical Neglect*, and *The Children We Abandon*.³⁻⁵ Agreeable intersections are infrequently remembered, so we reintroduce Rowland Hill, MA (1744–1833), a minister-vaccinator whose legacy is a concord between science and religion, reminding contemporary pediatricians that religious allies exist even in vaccine-contentious societies.

“No generalization has proved more seductive and tenacious than that of ‘conflict’,” write historians Lindberg and Numbers⁶ of the relationship between science and religion. The writings of Richard Dawkins⁷ are a contemporary manifestation of this tenacious generalization, but the notion of a historical conflict between science and religion began over 150 years ago in similar texts by Andrew Dickson White⁸ and John William Draper.⁹ Draper,⁹

a prominent scientist and son of a Wesleyan clergyman, wrote a *History of the Conflict Between Religion and Science* in 1874, which he concluded was “a narrative of the conflict of two contending powers, the expansive force of the human intellect on one side, and the compression arising from traditionary faith and human interests on the other.”⁹ Conflict narratives like Draper’s⁹ spread so widely in the following century^{6,10-12} that Numbers¹⁰ concluded this narrative has now settled into a received wisdom in which the secular public “*knows* that organized religion has always opposed scientific progress” and “the religious public *knows* that science has taken the leading role in corroding faith.”

The history of religion and vaccination can similarly be narrated as a conflict. Reverend Edmond Massey¹³ vigorously opposed inoculation in 18th century England, and a 1905 compulsory vaccination lawsuit that reached the US Supreme Court involved a minister defendant.¹⁴ Yet, the pro-inoculation preaching of Boston clergyman Cotton Mather^{6,15} and the vaccination work of early 19th century French Catholic priests¹⁶ demand accounts of science and religion fighting together against disease. Emblematic of these instances is the legacy of Rowland Hill (Fig 1),



Departments of ^aPediatrics and ^cBehavioral Health, Denver Health Medical Center, Denver, Colorado; and Departments of ^bPediatrics and ^dPsychiatry, School of Medicine, University of Colorado Denver, Aurora, Colorado

Dr Williams conceptualized and drafted this essay; Dr Nussbaum provided critical feedback and revisions; and both authors approve the final manuscript as submitted and agree to be accountable for all aspects of the work.

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Address correspondence to Joshua T.B. Williams, MD, Department of Pediatrics, Denver Health Medical Center, Webb Pediatric Clinic, 301 W. 6th Ave, MC #1911, Denver, CO 80204. E-mail: joshua.williams@dhha.org

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whose work in a vaccine-contentious 19th century England led his peers to suggest he was, “perhaps, next to Jenner, [...] the means of saving more lives than any other individual.”¹⁷

Born on August 23, 1744, in Shropshire, England, Hill earned a Master of Arts from Cambridge University and seemed destined for academia. Yet, after hearing the itinerant Methodist preacher George Whitefield, Hill abandoned the university for the mission fields. Hill’s biographer wrote, “If the merit of originality be justly due to Mr Whitefield, as the chiefest apostle of Methodism, Mr Hill was not a whit behind him.”¹⁷ Hill avoided the Deist and Antinomian tendencies of his time and focused his theology on personal piety, alleviation of suffering, and care for the poor. For years, Hill preached throughout the English countryside. In 1783, he settled in London, built the nondenominational Surrey Chapel and spent the next 50 years ministering to his congregation. During London’s noxious summers, Hill traveled to Wotton-Underedge, a small town 10 km from Berkeley, Edward Jenner’s residence. Through unclear circumstances, Hill and Jenner developed an intimate friendship,¹⁸ and “a strong prepossession in favour of [vaccination], naturally took place upon [Hill’s] mind.”¹⁹ As a Christian, Hill¹⁹ viewed vaccination as a discovery that alleviated suffering and “well deserves the patronage of all those who wish to exemplify the truly Christian mind.” Importantly, Hill believed this discovery was for rich and for poor, unlike inoculation, which had been restricted to the wealthy and distrusted by the poor in 18th century England.¹⁵ Hill¹⁹ knew “vaccination will never become the general blessing of the land” if controlled by fee-based practitioners, finding “it necessary to turn practitioner” and resume itinerant preaching in 1804. This



FIGURE 1
Rowland Hill with a book in one hand and spectacles in the other.

time, he brought a lancet. “Where he went to preach,” wrote Jenner’s biographer, “he announced after his sermon, ‘I am ready to vaccinate to-morrow morning as many children as you choose; and if you wish them to escape that horrid disease the small-pox, you will bring them.’”¹⁸ To multiply his efforts, Hill instructed fellow ministers on the use of a lancet and established a vaccination board at Surrey Chapel, which Jenner’s biographer hailed as one of the most effective in London.¹⁸ Taking stock of his work in 1806, he reported “ten thousand cases, near five thousand of whom were inoculated with my own hand.”¹⁹ Many more were indirectly inoculated through Hill’s efforts.

Along with his lancet, Hill wielded a pen to combat antivaccine sentiments. Among others, Moseley²⁰ cited concerns about introducing bovine substances into the human body: “Can any person say what may be the consequences of introducing the *Lues Bovilla*, a *bestial* humour – into the human frame, after a long lapse of years?” Exasperated by repeated attacks, Hill responded in *Cow-Pock Inoculation: Vindicated and Recommended From Matters of Fact*. Hill’s¹⁹ target audience was broad, but he wrote especially to clergy hoping that ministers, “having an influence over their congregations, might more easily

remove prejudices.” He refuted antivaccination claims, bristling at their “hypocritical reverence for deity,” and provided vaccination technique in the Jennerian style.¹⁹ Two centuries later, as fears about vaccines remain, contemporary pediatricians who encounter antivaccination campaigns may sympathize with Hill’s¹⁹ frustration: “Was ever such mere rhapsody and nonsense [...] produced before!!!”

Before dying at 88, Hill became a director of the Royal Jennerian Society and witnessed the decline of smallpox in England. Hill’s work was crucial to its decline and key to the provision of vaccines to the poor. “Posterity has interest in the character of such a man,” wrote William Jones¹⁷ in 1834, and “such parts of his history as may minister to their instruction.” Ultimately, Hill’s legacy challenges the conflict narrative that can blind vaccination advocates to the possibility of religious allies.¹⁷ Such alliances can increase vaccine uptake in local settings, as among New York’s Kiryas Joel Jewish Orthodox communities who partnered with health officials to create and disseminate an educational pamphlet entitled *Tzim Gezint* (A. Werzberger, MD, personal communication, 2017). Alliances can also succeed on larger scales. Dale and Betty Bumpers employed faith-based organizations in Arkansas mass vaccination campaigns in the 1970s, and the evangelical Jimmy Carter quadrupled immunization spending and expanded school immunization laws.^{15,21} One hears echoes of Hill’s exhortation to make vaccination “the general blessing of the land” in these grand gestures of social justice, which endure today in programs like Vaccines for Children.²²

“Let our exertions be universal, immediate, and zealous,” Hill¹⁹ wrote, “and I am very sure a death by the small-pox will be brought forward as a very rare instance

indeed; in short, I believe that no one disease will be less fatal than that which is now so much the dreaded scourge of the human race.” Hill helped end a dreaded scourge, and his legacy ministers to our instruction. How could we face one of today’s scourges, the antivaccination movement, in the spirit of Rowland Hill? “As a first step,” suggests Numbers,¹⁰ “we must dispel the hoary myths [about religion and science] that continue to pass as historical truths.” We offer this reintroduction of Hill to counter myths, encourage pediatricians to find religious allies, and take up lancets and pens anew in pursuit of universal vaccination.

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