

# Gavin Weightman, *The Great Inoculator: The Untold Story of Daniel Sutton and His Medical Revolution*

Gavin Weightman, *The Great Inoculator: The Untold Story of Daniel Sutton and His Medical Revolution*, Yale: Yale University Press, 2020. Pp. xvi + 188. \$35.00. Hdbk. ISBN 978 0 300 24144 0.

Peter Razzell ✉

*Social History of Medicine*, Volume 34, Issue 3, August 2021, Pages 1033–1034, <https://doi.org/10.1093/shm/hkaa077>

**Published:** 10 October 2020

**Issue Section:** Book Reviews

In February 1796, a contributor to the *Gentleman's Magazine* wrote:

The increase of people within the last 25 years is visible to every observer ... Inoculation is the mystic spell that has produced this wonder ... It is now 30 years since the Suttons, and others under their instructions, had practised their skill in inoculation upon half the kingdom, and had reduced the risk of death to the chance of one in 2000. Hence the great increase in people.... (p.158)

We do not have to take this exaggerated claim too seriously, but it does indicate the importance that contemporaries attached to the activities of Daniel Sutton and his family in promoting smallpox inoculation. Sutton is virtually unknown at present, having been eclipsed by Edward Jenner, but now Gavin Weightman in his new book—*The Great Inoculator: The Untold Story of Daniel Sutton and His Medical Revolution*—has set out to redress this neglect.

The book is not designed as an academic treatise, but is written in a highly readable format, with a focus on people and their role in developing inoculation. It examines all the problems and disputes that this first form of medical prophylaxis

encountered and its eventual success, but does so in such a way that it carries the reader through a highly complex subject.

Lady Mary Wortley had experienced inoculation while living in Turkey as wife of the British Ambassador and had her 3-year-old son inoculated while resident there. This was undertaken by a Greek woman with the help of the ambassador's surgeon, Dr Maitland. They took some smallpox matter from a pustule on the arm of a smallpox patient, and injected it by insertion in the skin of the young boy. The operation was a success with only mild resulting symptoms, and when Lady Mary returned to England she promoted the practice partly through having her daughter inoculated, but also through her influence with the Royal Family. They arranged for a trial with six Newgate prisoners, five of which were condemned to be hanged, but were reprieved if surviving the unknown operation. All survived, and after a further trial, Princess Caroline agreed to have her children inoculated, and as with the earlier trials it was successful.

However, Lady Mary was unhappy with the way the latter inoculations were carried out, as they involved deep incisions with a lancet, along with preparation involving bleeding and purging. In an anonymous publication, she described how the Greek nurses 'take it [the smallpox matter] in a nutshell, which holds enough to infect fifty people' and inoculate with a needle, similar to the modern practice of smallpox vaccination.

The complicated practice of inoculation practised by physicians and eminent surgeons was more dangerous than the Turkish practice and resulted in severe symptoms and sometimes death. After about 40 years of this practice, the Sutton family simplified both the technique and preparation of inoculation. The Suttons kept their technique secret in order to preserve its commercial success, but the person to realise the essence of its success was Edward Jenner, who described how the Suttons made the lightest possible incisions in their inoculations. Jenner himself had been inoculated as a boy with the severe form in about 1756, but later practised the much more mild method pioneered by Daniel Sutton. Jenner stated in his first publication that the 'common people were very rarely

inoculated for the Small Pox, till that practice was rendered general by the improved method introduced by the Suttons'.<sup>1</sup>

He was initially very modest in his claims for the benefits of the new vaccination: 'Should it be asked whether this investigation is a matter of mere curiosity ... I should answer, that notwithstanding the happy effects of Inoculation ... it not very unfrequently produces deformity of the skin, and sometimes, under the best management, proves fatal.'<sup>2</sup>

For 40 years, vaccination competed with inoculation, with the latter being much more popular with ordinary people than the wealthy. This was especially the case after the failure of vaccination to protect against future attacks of smallpox, requiring re-vaccination, whereas inoculation protected for a lifetime. Inoculation did on very rare occasions spread smallpox to unprotected people, which was why it was outlawed in 1840.

It did however protect the majority of the population, particularly under general inoculations covering the whole of a parish population. Gavin Weightman has provided the details of this success and is to be congratulated in publishing this during a period of great anxiety as a result of the COVID-19 infection. Inoculation was the first significant medical prophylaxis, and there are many lessons to be learnt from this example of a major medical innovation.

## Footnotes

---

1 Peter Razzell, *The Conquest of Smallpox* (2003), 93.

2 *Ibid.*

© The Author(s) 2020. Published by Oxford University Press on behalf of the Society for the Social History of Medicine.

This article is published and distributed under the terms of the Oxford University Press, Standard Journals Publication Model ([https://academic.oup.com/journals/pages/open\\_access/funder\\_policies/chorus/standard\\_publication\\_model](https://academic.oup.com/journals/pages/open_access/funder_policies/chorus/standard_publication_model))