



John Winthrop the Younger (1606–1676).

CONTRIBUTOR: Howard A. Pearson, MD, FAAP

Department of Pediatrics, Yale University School of Medicine, New Haven, Connecticut; and American Academy of Pediatrics Historical Archives Advisory Committee

Address correspondence to Howard A. Pearson, MD, FAAP, Department of Pediatrics, Yale University School of Medicine, 333 Cedar St, New Haven, CT 06510. E-mail: howard.pearson@yale.edu

Accepted for publication Jun 29, 2010

doi:10.1542/peds.2010-1463

Colonial Pediatrics in the 1600s: Governor John Winthrop the Younger of Connecticut

It is hard for us to imagine the experience of parenting in colonial New England, where infectious diseases such as smallpox, measles, and diphtheria swept through communities and over one-fifth of the infants in some communities never lived to see their first birthday. Evidence from the 17th century is particularly sparse. Physicians were almost nonexistent. Mothers no doubt provided much medical care on their own. Educated members of the community, notably clerics and even politicians, represented another source of medical knowledge. In this essay, Dr Howard Pearson uses the writings of one such community leader to provide a window on child health in this distant era. Despite many obvious differences from pediatrics today, the reader will also see points of continuity. Just as patients today seek to contact their physicians by e-mail, it is notable that this colonial “health care provider” conducted much of his practice by mail.

Jeff Baker, MD, PhD

The New England colonies were established in the early 17th century by English religious dissidents and families and individuals who were seeking new homes and opportunities. These were perilous times for children. Dr Ernest Caulfield vividly described the plight of colonial children:

“In addition to lethal epidemics of measles, diphtheria (throat distemper), small pox and especially dysentery (bloody flux) a surprisingly large proportion of colonial children had worms. Death frequently followed from eating poisonous beans and so called ‘mushrooms.’ Hardly a year went by without reports of children fatally burned from playing with candles or falling into an open fire. More were drowned from falling off wharves or into unguarded wells.

When one considers that, in addition to these hazards, an incalculable number suffered from serious noncontagious disease particularly ‘convulsive fits,’ it seems surprising that any of them survived.”

There were few trained physicians to address the enormous medical problems of the time, and medical care, such as it was, was often provided by pastors and politicians who were about the only educated people in the colonies. The clergymen-physicians, exemplified by the Reverend Cotton Mather, practiced the “angelical connection”—the cure of body and soul.

The greatest of the politician-physicians was John Winthrop the Younger (or Jr), who was governor of Connecticut in the mid-

1600s. John Winthrop the Younger was born in Suffolk, England, son of John Winthrop the Elder, who was the founder and first governor of the Massachusetts Bay Colony. John Winthrop the Younger was educated at Trinity College in Dublin, Ireland. He studied law at the Inner Temple in London, England, and was admitted to the bar but never practiced. For several years he traveled extensively throughout Europe and the Middle East, conversing and studying with scientists and physicians and building the foundations for his subsequent medical practice. In 1631 he followed his father to the New World and served for a number of years as his assistant. In 1635 he established a new colony in Saybrook, Connecticut, and lived there for several years before returning to Massachusetts. In 1645 he founded the first American iron works foundry in Saugus, Massachusetts, which today is a national historic site. In 1662 he went to England and secured a charter for the Connecticut Colony from King Charles II. He then moved to Pequot (New London, CT), where there is a statue of him, then to New Haven and, finally, to Hartford. In 1657 he was elected governor of the Connecticut Colony and was repeatedly reelected until his death in 1676.

Winthrop the Younger was a considerable scholar and scientist with broad interests including chemistry, metallurgy, astronomy, botany, and materia medica. He had, for the times, an extensive library containing more than one thousand books in several languages. He was the first American to be elected to the Royal Society of London and corresponded with many scientists in England and Europe.^{2,3}

Despite a lack of formal medical training, Winthrop the Younger was arguably the outstanding medical figure in the mid-17th century American colonies, and he became renowned throughout New England for his medical prowess. The Reverend Cotton Mather, the great puritan preacher, was quoted by Dr T. E. Cone as saying of Winthrop, "Wherever he came, the diseased flocked about him as if the healing angel of Bethesda had appeared in the place."⁴

He had an extensive practice, and it was estimated that he served as many as 500 Connecticut families in a population of only 5000 persons.^{5,6} He was frequently consulted because of the scarcity of physicians in Connecticut and because of his willingness to give advice free of charge.

In addition, Winthrop corresponded through the colonial mails with patients throughout the New England colonies concerning a wide spectrum of medical problems. The most important mail route that carried Winthrop's letters was the Boston Post Road, also called the King's Highway, which went from New Amsterdam through coastal Connecticut and through the Providence plantations to Boston. Using the colonial mails, he made diagnoses and prescribed treatments and medications. Winthrop's papers, some of which are preserved in a special

collection at Boston's Countway Medical Library, contain mostly letters from all over New England asking for medical advice and treatment. These letters have been studied by historical scholars including Drs Oliver Wendell Holmes, W. R. Steiner, and T. E. Cone Jr, who have publications about the Winthrop papers that contain verbatim extracts from the letters that are quoted in this article.⁴⁻⁷ In most instances, Winthrop's responses to these letters are not included in the papers.

In the letters are descriptions of recognizable pediatric conditions including epidemic measles, a variety of rashes, convulsions, diarrhea and dehydration, jaundice, whooping cough (*chincough*), failure to thrive, and anencephaly. Some of the letters are particularly relevant to pediatrics today.

Danielle Clarke of Windsor, Connecticut, sought Winthrop's advice about his son's dental problems:

"I have a little one who is now 4 year old that is now troubled with four of his foremost teeth on the upper part of his mouth which began to fade away in the first year of life, and continued fading away and are now rotted into his gums."

This letter-writer obviously describes what is now called nursing-bottle caries syndrome, which is a result of prolonged bottle-feeding and putting infants to bed with a bottle of sweetened liquids in their mouths.⁸ Dr Cone commented, "There were no nursing bottles at that time, so this was probably caused by the use of a homemade cloth or leather pacifier soaked with honey or molasses."⁴

The Winthrop papers include a clear description of child abuse. Theophilus Eaton, a founder of the Quinnipiac (New Haven) Colony, sought Winthrop's advice because his second wife had

"pinched [her stepdaughter] Mary, until she was black and blue and knocked her head against the dresser which made her nose bleed much."

Some 300 years later, Dr C Henry Kempe, who trained in pediatrics at the Grace New Haven Hospital in the 1940s, gained international fame for his description of the battered child syndrome.⁹

In one of the few Winthrop responses, he wrote to a Mr Richard Odell regarding his young daughter's "palsy." She had suddenly fallen to the floor and was then unable to speak or to stand because of profound left-sided weakness:

"This seems to be that kind of palsy which we call hemiplegia where half of the spinal marrow is affected. It may come from a mild apoplexy that strikes suddenly and leaves commonly one side of the body without sense or motion."⁵

Winthrop had a "sovereign remedy" that he called "rubila," the formulation of which he kept secret. Dr Oliver Wendell Holmes studied the Winthrop papers and found that rubila was mostly nitre (saltpeter) and lesser amounts of antimony. Rubila was colored red (rubified) to make it look different from plain salt or sugar.⁷ Winthrop believed that

rubila was effective treatment for a variety of illnesses including “measles, colics, headaches and sciatica and many other ailments.”⁴ However, he cautioned that to be effective rubila had to be given at the very beginning of an illness (or perhaps even better before the illness had begun).

John Winthrop the Younger died in 1676 while attending a meeting of the governors of the United Colonies of New England in Boston. He was buried beside his father in the historic King’s Chapel Burying Ground in Boston, where his grave stone can still be seen.

REFERENCES

1. Caulfield E. Some common diseases of colonial children. *Trans Colonial Soc Mass*. 1951;35:4–65
2. Connecticut State Library. John Winthrop Jr Governor of Connecticut 1657, 1659–1676. Available at: www.cslib.org/gov/winthropj.htm. Accessed July 21, 2010
3. Gordon MB. *Aesculapius Comes to the Colonies*. Ventor, NJ: Ventor Publications Inc; 1949:182–228
4. Cone TE Jr. Governor John Winthrop, Jr. In: *History of American Pediatrics*. Boston, MA: Little, Brown and Company; 1979:14–18
5. Steiner WR. Governor John Winthrop, Jr of Connecticut as a physician. *Bull Johns Hopkins Hosp*. 1903;14:295–302
6. Steiner WR. Governor John Winthrop, Jr of Connecticut as a physician. *Bull Johns Hopkins Hosp*. 1906;17:357–360
7. Holmes OW. *Medical Essays*. Boston, MA: Houghton-Mifflin; 1911:335
8. Kempe CH, Silverman FN, Steele BF, Droegemueller W, Silver HK. The battered child syndrome. *JAMA*. 1962;181:17–22
9. Shelton PG, Berkowitz RJ, Forrester DJ. Nursing bottle caries. *Pediatrics*. 1977;59(5):777–778

FINANCIAL DISCLOSURE: The author has indicated he has no financial relationships relevant to this article to disclose.

Colonial Pediatrics in the 1600s: Governor John Winthrop the Younger of Connecticut

Howard A. Pearson

Pediatrics 2010;126;405

DOI: 10.1542/peds.2010-1463 originally published online August 30, 2010;

Updated Information & Services

including high resolution figures, can be found at:
<http://pediatrics.aappublications.org/content/126/3/405>

References

This article cites 5 articles, 1 of which you can access for free at:
<http://pediatrics.aappublications.org/content/126/3/405#BIBL>

Subspecialty Collections

This article, along with others on similar topics, appears in the following collection(s):
Medical Education
http://www.aappublications.org/cgi/collection/medical_education_sub
Workforce
http://www.aappublications.org/cgi/collection/workforce_sub
Administration/Practice Management
http://www.aappublications.org/cgi/collection/administration:practice_management_sub

Permissions & Licensing

Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
<http://www.aappublications.org/site/misc/Permissions.xhtml>

Reprints

Information about ordering reprints can be found online:
<http://www.aappublications.org/site/misc/reprints.xhtml>

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Colonial Pediatrics in the 1600s: Governor John Winthrop the Younger of Connecticut

Howard A. Pearson

Pediatrics 2010;126:405

DOI: 10.1542/peds.2010-1463 originally published online August 30, 2010;

The online version of this article, along with updated information and services, is located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/126/3/405>

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2010 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 1073-0397.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

