

Childhood Death: The Health Care of Children on the Kansas Frontier

by Charles R. King

DEATH WAS COMMON on the western frontier. Death from gun fights or Indian attacks has been romanticized far beyond its frequency. Much more common, and thus devastating for the individual family, were infant and maternal deaths. An empty chair at the family table was not only an emotional loss, but a significant economic loss as well. In fact, few nineteenth-century American families did not experience the loss of one or more children. In 1890, whether in urban New York City, where forty percent of all deaths were accounted for by the deaths of infants and children, or Leavenworth, Kansas, where 134 of 233 burials were for infants and children less than five,¹ infant death was frequent. Infant mortality continued as a major health problem into the twentieth century, when public health measures, better nutrition, improved personal hygiene, and enhanced medical knowledge combined to diminish these contributors to infant and child death.

Many factors were responsible for the high frequency of infant death during the nineteenth century. Immigrant American children had a higher infant death rate than native-born children. This was true of the Irish in New York or Boston; as well as the Italian immigrants of Buffalo, New York, where one-third of the infants died "due to unsanitary conditions in their over crowded homes as well as diseases such as cholera, tuberculosis and infant diarrhea."² Infant death was unequally distributed across social classes. For example, in New York City ten times as many infants died in the general population as among the families of the upper classes. Much of this increased risk for infant death among the lower socioeconomic classes was accounted for by the poorer personal hygiene, overcrowded housing conditions, limited

methods of artificial feeding, and the poor sanitary conditions experienced by families of limited means. Public sanitation was largely absent, and in many cases city streets were little more than open sewers. Physicians had not uniformly accepted the germ theory, nor developed therapeutic means to treat infectious diseases, nor recognized that children were more than "miniature men and women." In sum, as George Rosen has noted, infant mortality was "a sensitive indicator of community health because it [reflected] the influences exerted by various social factors,"³ and these social factors were important causes for the high rate of infant mortality.

On the western frontier infant death was also frequent, and a contemporary count of existing headstones and burial mounds chillingly confirms these tragic events. In 1875 Leavenworth, nearly fifty percent of the 354 burials were those of infants and children.⁴ Infectious diseases were responsible for the majority of these deaths. During this year only one child was buried following an accidental death (drowning). A second burial, a child who died at two months of age from internal injuries, suggests the possibility that this death was caused by child abuse. Two years earlier eight children were buried with "teething" recorded as the cause of death. This was certainly not the cause, but rather this attribution represents evidence of the limited medical knowledge about children available to the nineteenth-century physician. Similar reports were recorded in nearby Kansas City, Kansas, during 1893, the first complete year for which vital statistics were kept. Among 164 children less than ten years of age, only nine children had a recorded cause of death not explained by infectious diseases.⁵

Reports from throughout Kansas also illustrate the significance of infant and childhood infectious diseases as a cause for infant mortality; but these records also demonstrate an important problem for the analy-

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1. Kathleen W. Jones, "Sentiment and Science: The Late 19th Century Pediatrician as Mother's Advisor," *Journal of Social History* 17 (1983): 79-96; Records of Mount Muncie Cemetery, Leavenworth, Kansas [hereafter cited as Records, Mount Muncie Cemetery].

2. Selma Berrol, "Ethnicity in American Children," in Joseph M. Hawes and N. Ray Hiner, eds., *American Childhood: A Research Guide and Historical Handbook* (Westport, Ct.: Greenwood Press, 1985), 344.

3. George Rosen, *A History of Public Health* (New York: MD Publications, 1958), 342.

4. Records, Mount Muncie Cemetery; Records of Mount Calvary Cemetery, Leavenworth, Kansas [hereafter cited as Records, Mount Calvary Cemetery].

5. Death Records of Kansas City, Kansas, City-County Courthouse, Kansas City, Kansas.



Women and children faced a host of health hazards on the western frontier—often with no medical aid but home remedies, patent medicines, and midwives.

sis of frontier statistics, underreporting. For example, the *Third Annual Report of the Kansas State Board of Health* reported only three deaths from measles in the entire state in 1886. Only thirty-nine counties were included in this report, but even for these counties this certainly represented underreporting of the frequency of this common childhood disease. A decade later, better reporting was available, as nearly all Kansas counties participated, and in that year eighty-seven children were noted as dying from a measles infection.⁶ The absence of more accurate statistics limits the conclusions that may be made accurately from this era; but if an accurate quantitative assessment is not possible, the available information provides at least a qualitative understanding of infant and child health on the nineteenth-century Kansas frontier.

6. Kansas State Board of Health, *Third Annual Report* (Topeka: State Printer, 1888), 102; Kansas State Board of Health, *Thirteenth Annual Report* (Topeka: State Printer, 1898), 86.

The Child and the Physician

During much of the nineteenth century the health care of children was not recognized as distinctly different from the medical care of adults. It was not until 1880 that the American Medical Association first established a "Section on the Diseases of Children." Five years before, one Kansas physician in an address to the Kansas Medical Society considered that the specific recognition of the diseases of children made "the subject of Infantile Diseases proper far more complex and voluminous than it ought to be." Although failing to note the unique nature of childhood diseases, the doctor did recognize the greater effect of "therapeutic measures" on infants and children. He reported the effect as greater and "the tolerance less." He rightfully concluded, "taken all in all [it] is not more difficult than [the diagnosis] of diseases of adults, if observation and study have been added to experience."⁷

Not only physicians, but also the public, failed to recognize that the diseases of infants and children required special attention. Most Americans believed that little could be done because "either they [childhood diseases] were too trivial or, paradoxically, too abrupt, elusive, and fatal to warrant the physician's intervention." As with other aspects of lay medical practice, domestic advice books, such as Gunn's *New Domestic Physician*,⁸ were important sources for family advice. Many other individuals, often with limited medical knowledge, were also consulted; as one pioneer woman reported, "one of the hired men had studied for a doctor and the other was also dependable."⁹ For frontier families such lay advice was at least as important as that obtained from regular physicians.

Even if professional care was not commonly sought, parents were regularly concerned about illness and possible death for their children. This could cause a nineteenth-century father to postpone his travels, as was the case for Samuel Howe. "As soon as she is better, or so that I shall not worry and be pained by the thought that the poor thing is asking for Papa, I shall start."¹⁰ Or, it could cause a family friend, tending a sick child, to report of the child dying with consumption: "I got greatly attached to the little body."¹¹ Bitter loss was recorded by an Illinois woman in her diary.

7. J. H. Stuart, "Infantile Diseases," *Transactions of the Kansas Medical Society* 1 (1875): 23.

8. George Rosen, *The Structure of American Medical Practice 1875-1941* (Philadelphia: University of Pennsylvania Press, 1982), 2; J. C. Gunn, *New Domestic Physician . . . 100th Ed* (Cincinnati: 1862).

9. Lucy Foster-Sexton, *The Foster Family, California Pioneers* (Santa Barbara: Schauer Printing Studio, 1925), 235.

10. Linda A. Pollock, *Forgotten Children: Parent-Child Relations from 1500 to 1900* (New York: Cambridge University Press, 1982), 131, 139.

11. Elizabeth Hampsten, *Read This Only to Yourself: The Private Writings of Midwestern Women, 1880-1910* (Bloomington: University of Indiana Press, 1982), 86.

I was cast into the very depths of despair—I felt as though I could not live longer separated from him—in bitter anguish I cried unto the Lord to prepare me for death & then take me from this world of suffering.¹²

This emptiness would lead one woman to record that her friend had asked "if I would give Lelah [my daughter] to her,"¹³ to replace the lost child.

The physician-parent also experienced the threat and dread of childhood illness.

I have sat and watched my own little daughter in convulsions for twelve hours, as utterly paralyzed with terror as any layman. After a short sleep she awakened and asked, "Where is my doll?"—the sweetest words ever spoken . . . That memory freezes the marrow of my bones after more than thirty years.¹⁴

But at the same time, this practitioner reported the positive joy of saving a sick child.

To see the contracted limbs relax, the head lift itself from the depths of the pillow; to see the light return to the mother's eyes, and the smile to her lips—that is one of the greatest experiences in life.¹⁵

Unfortunately, since families often called the physician too late, and since practitioners generally lacked effective means of treatment, the doctor often did not experience this joy. One physician recorded sitting by the cradle while the child died. The doctor and the infant's mother both watched as the "last quiver passed over the little body." They recognized that the baby was dead, but "there was no weeping."¹⁶ The frequency of infant death did not reduce the sense of loss, but it did lead to the expectation, for both parents and physicians, that infant death might occur.

For the most part the medical care of children, as was true of most nineteenth-century medical care, was provided in the home. Before 1900, only rarely were children admitted to Kansas hospitals. The first hospital in Kansas, St. John's Hospital of Leavenworth, admitted only two children in 1885, and a similar number the following year. In 1887, at Christ's Hospital in Topeka the only child admitted was a twelve-year-old burned by a fire. Two years later the only child admitted to St. Margaret's Hospital in Kansas City was a girl with a gunshot wound in the head.¹⁷

12. Glenda Riley, *The Female Frontier: A Comparative View of Women on the Prairie and Plains* (Lawrence: University Press of Kansas, 1988), 52.

13. Hampsten, *Read This Only to Yourself*.

14. Arthur E. Hertzler, *The Horse and Buggy Doctor* (New York: Harper, 1938), 116.

15. *Ibid.*

16. *Ibid.*, 125.

17. Hospital Records, St. John's Hospital, Leavenworth, Kansas; Hospital Records, Christ's Hospital, Topeka, Kansas; Hospital Records, St. Margaret's Hospital, Kansas City, Kansas.

Children were also treated in the doctor's office. Dr. J. C. Parrish of Vandalia, Missouri, reported a ten-year-old boy who was brought to the office after falling on the sidewalk. The boy caught his arm as he fell and fractured the humerus and dislocated the shoulder. The doctor reduced the dislocation by "overcoming the resistance of the muscles, I gave it a somewhat circular movement, downward; around and forward, which threw it into the cup very easily."¹⁸

On the western frontier medical attention was often necessary under less favorable circumstances. For example, Jane Gould Tourtellott reported in her diary for her 1862 westward journey a child quite seriously injured when he was run over by a wagon. "They sent for a German physician that belongs to our train, to see the child that was injured. He said he thought it would get better."¹⁹ John Ise reported that his seven-year-old brother had been bitten by a snake. He "went out to the cane patch, barefooted of course, to get a stick of cane to chew, and a small rattler bit him on the foot. He was delirious for a couple of days,"²⁰ but a physician was not consulted.

Infectious Diseases

The most important causes of infant death were infectious diseases. Dr. G. H. T. Johnson from Atchison, Kansas, and the first president of the Kansas State Board of Health, reported that in the United States during 1873 there were more than 150,000 deaths from childhood infection.²¹ Many of these conditions, like whooping cough or measles, are now preventable with immunization, but during the nineteenth century such prevention was not possible. Ella Hull Fulton, who arrived in Leavenworth from Ohio in 1863, recalled that all of her siblings had whooping cough, and that her brother Arthur "had the infantile paralysis and did not walk and was left a cripple." Ella's own daughter Sadie, born in 1875, could not walk at seventeen months of age because she had a "very bad" case of whooping cough and was left "weak and poor."²² Two years before, seventeen children were buried at Leavenworth's Mount Muncie Cemetery, when they died from this disease.²³ Even

18. Medical Records of Dr. J. C. Parrish, Western Historical Manuscript Collection, University of Missouri, Columbia [hereafter cited as Medical Records, Dr. J. C. Parrish].

19. Lillian Schlissel, *Women's Diaries of the Westward Journey* (New York: Schocken Books, 1982), 222.

20. John Ise, "Mother's Recollection of Her Early Life," (unpublished manuscript, Kansas Collection, Spencer Library University of Kansas Libraries, Lawrence, Kansas [hereafter cited as Kansas Collection]), 18.

21. G. H. T. Johnson, "Prevention of Disease," in Kansas State Board of Health, *First Annual Report* (Topeka: State Printer, 1886), 119-22.

22. Ella Hull Fulton, "My Life as I Remember," (unpublished manuscript, Kansas Collection), 4, 14.

23. Records, Mount Muncie Cemetery.

when children survived a potentially fatal childhood illness, the parents were well aware of its possible detrimental effects. Elizabeth Early wrote her mother from Lawrence, Kansas, that her daughter Carrie had been "very sick for two weeks" with the measles. The "dear little creature" was now well, but the mother's tone in her letter and her conclusion "you don't know how I love her," clearly show the relief provided to a worried mother when her child was again healthy.²⁴

Scarlet fever, which is caused by a streptococcal bacterial infection, was another common condition that could be lethal. In 1869, thirty-six children were buried in Leavenworth, after they died from this disease,²⁵ and in 1878, Harriet Humphrey Everts, the wife of a grocer, reported from Topeka:

The scarlet fever has prevailed all winter. Four children in our near neighborhood were sick a few weeks ago and one died, but ours have none of them been sick. I think the disease is about over as I have heard of no new cases lately.²⁶

A decade later Flora Heston, writing from southwestern Kansas, reported a neighbor's child had died with scarlet fever. The family was nearly "prostrated with grief."²⁷ Flora was thankful to the "kind Father above who will ever care for us," because she had her health and "precious little ones." Nonetheless, infant death was always tragic for the family, especially when there was "no physician to help," nor "minister to comfort." One mother reported the loss of her "sweet, beautiful" first son to erysipelas,²⁸ another condition caused by a streptococcal infection.

I held him in my arms till the last agony was over. Then I dressed the beautiful little body for the grave. Clyde [her husband] is a carpenter; so I wanted him to make the little coffin. He did it every bit, and I lined and padded it, trimmed and covered it. Not that we couldn't afford to buy one or that our neighbors were not all that was kind and willing; but because it was a sad pleasure to do everything for our little first-born ourselves.²⁹

As they are today, respiratory infections also were common on the frontier. At mid-century one settler reported from Jasper County, Missouri: "the winter fever has prevailed to some considered extent in this section, especially in the school and surrounding

neighborhood. The disease seems to be very stubborn but has not proven fatal in but few cases." He hoped that "better weather" would provide "better health."³⁰ Many individuals in the nineteenth century considered such "throat and lung troubles," or "catarrhs," as "one of the stepping stones to consumption."³¹ At the least, such problems delayed child development. Edward Fitch reported to his parents from Lawrence, Kansas, in 1859 that their granddaughter Julia had not walked because she had been "very sick with inflammation of the Bronchial Tubes."³² But God had "very graciously spared her," and the proud father was able to add a postscript to his letter—Julia could now "walk alone!!"

During the nineteenth century, physicians were often of little benefit to sick children. A Lawrence mother reported her son had pleurisy and was visited by the doctor seven times in one day.³³ Yet, the doctor could offer few therapeutic aids. Plasters of mustard or lead and camphor were often spread over the breast. Even by the end of the century physicians had few additional means of therapy available.³⁴ The better physicians of the day used the newer instruments, such as the stethoscope, to recognize pulmonary disease. Dr. J. C. Parrish diagnosed "bronchial catarrh" by this means, because he "could hear a rattling noise showing the Bronchial tubes were secreting too much mucous."³⁵ Thus, by the end of the century physicians were often capable of more accurate diagnosis, but they rarely provided better therapy than what families already had available for themselves.

Some infectious conditions, like smallpox or cholera, were especially fearful for both nineteenth-century families and their physicians. Smallpox hospitals were constructed throughout the country to provide isolation of contagious individuals and prevent the spread of this disease. One such facility was erected within a decade of the founding of Leavenworth, where citizens feared possible quarantine should they develop the disease. At the same time medical treatment for smallpox was no more effective than the traditional American Indian practice of sweating followed by immersion in a cold stream. On her westward journey one woman reported that Indians were "dying by the dozens" following such

30. John Brown Draper to his Cousin Mary, February 25, 1849, Kansas Collection.

31. Sheldon Anthony to Hsa Stoddard, Manuscripts Department, Kansas State Historical Society [hereafter cited as Manuscripts, KSHS].

32. Edward Fitch to his parents, April 20, 1859, Kansas Collection.

33. Katie H. Armitage, "Elizabeth 'Bettie' Duncan: Diary of Daily Life, 1864," *Kansas History: A Journal of the Central Plains* 10 (Winter 1987-1988): 285.

34. J. W. Kyger, "Infantile Pneumonias," *Kansas City Medical Index* 15 (January 1894): 24-28.

35. Medical Records, Dr. J. C. Parrish.

24. Elizabeth Earl to her mother, March 30, 1862, Kansas Collection.

25. Records, Mount Muncie Cemetery.

26. Harriet Humphrey Everts to her mother, March 24, 1878, Kansas Collection.

27. Flora Heston to her husband, February 6, 1885, Kansas Collection.

28. Elinor Pruitt Stewart, *Letters of a Woman Homesteader* (Lincoln: University of Nebraska Press, 1961), 190.

29. Ibid.

treatment.³⁶ Disinfection of the home, even so strong it "spoiled everything in the house even killed the house plants," was also an ineffective remedy.³⁷ Therapy was unsuccessful, but prevention by vaccination was effective. In fact, before the start of the nineteenth century, the English physician, Edward Jenner, had demonstrated that vaccination with "the matter" from the lesions of cowpox prevented the development of smallpox. This knowledge was commonly known in the nineteenth century, but just as inoculation therapy a century before was controversial, so the same was true for vaccination on the western frontier. One woman expressed her fears of the procedure in 1830.

I think highly of his [the Doctor's] judgement, and I believe it to be our duty to avoid evil, both bodily and mentally. So trifling a complaint as the cow-pox, being likely to prevent so dreadful a disease as the small-pox, at least it appears justifiable to try it; although the idea is pleasant, it almost looks like taking too much on ourselves to give a child disease.³⁸

Even when faced with knowledge of a smallpox epidemic, many families on the frontier were still reluctant to undergo vaccination. The health officer of Marion County reported in 1885 that "many of the foreign population, especially the more ignorant, are greatly averse to vaccination." The health officer of Decatur County also noted a poor response "owing to the late hour at which the County Board of Health machinery was set to work." He estimated that less than ten percent of the at-risk children were vaccinated.³⁹ Such fears were not completely unfounded since deaths were reported following vaccination.

Incomplete vaccination of the population led to the periodic outbreak of the disease. In 1888, thirty-eight cases of smallpox were reported in Leavenworth, and similar outbreaks were found in Wichita and McPherson. Although one young lady was "liable to die," no deaths occurred. By July, an estimated three to five thousand vaccinations were performed in Leavenworth. As early as 1885, Dr. W. L. Schenck urged the Kansas State Board of Health and the legislature to take action to provide mandatory vaccination. He concluded that vaccination of the complete population would cause smallpox to be "utterly eradicated,"⁴⁰ a goal that would be achieved worldwide in the twentieth century.

36. Adrietta Applegate Hixon, *On to Oregon! A True Story of a Young Girl's Journey Into the West* (Weiser, Idaho: Signal-American Printers, 1947), 37.

37. Hampsten, *Read This Only to Yourself*, 98.

38. Pollack, *Forgotten Children*, 233.

39. Kansas State Board of Health, *First Annual Report*, 73-74, 90.

40. W. L. Schenck, "Small-Pox and Its Prophylaxis," in Kansas State Board of Health, *First Annual Report*, 127, 145; Kansas State Board of Health, *Fourth Annual Report* (Topeka: State Printer, 1889), 45-46, 63.



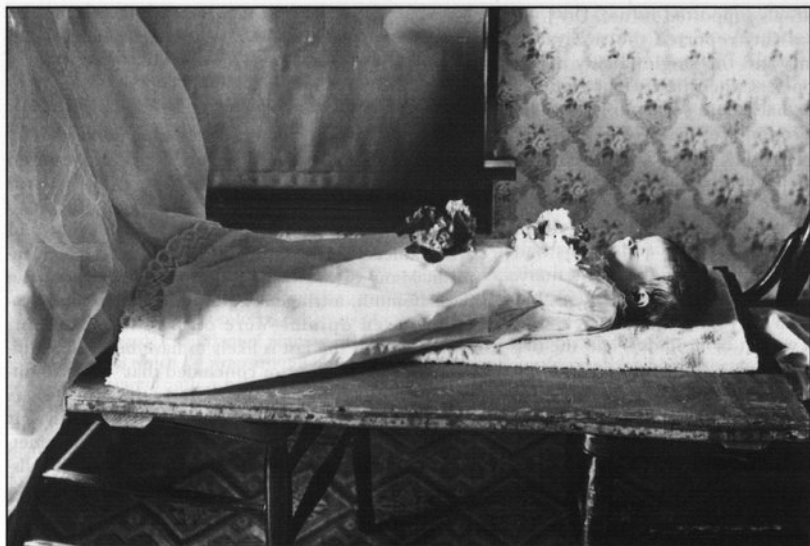
"Throat distemper," or diphtheria, was both a common and a feared childhood disease. It could be deadly, as evidenced by the New England epidemic of 1736-1737 when "twenty families in one town buried all of their children" and "another community lost more than half of all its children under fifteen years of age."⁴¹ Sheldon Anthony of Lawrence reported a nephew who had "just passed to spirit life his disease was diphtheria."⁴² The following year five diphtheria deaths occurred in the community, but the progress of the disease was stopped by "isolation, the prohibition of public funerals, and thorough application of disinfectants."⁴³ During February and March of 1888 eight children, including three from one family, died of diphtheria in Leavenworth.⁴⁴

41. Constance B. Schulz, "Children and Childhood in the 18th Century," in Hawes and Hiner, *American Childhood*, 68.

42. Anthony to Stoddard, Manuscripts, KSHS.

43. Kansas State Board of Health, *Second Annual Report* (Topeka: State Printer, 1887), 124.

44. Records of Mount Calvary Cemetery.



Few nineteenth-century families escaped the loss of at least one child. The material forms in which one grieved became more elaborate as the century reached its close, and it was not uncommon for the deceased child to be photographed, providing parents with the only visual reminder of this too quickly lost family member.

Quarantine of infected patients and families was practiced for diphtheria, as well as other communicable diseases. This was necessary because, in the words of Dr. Isaiah Miley of Phillips County, the diphtheria germs were so "tenacious, . . . that when once present they may remain latent for years."⁴⁵ During one such epidemic in Abilene in September of 1892, the health officer took the following measures:

Had a scarlet card, 7 by 11 inches, with the words "SCARLET FEVER," plainly printed thereon, tacked up near the entrance of each house containing a case. The older members of the family were ordered to thoroughly fumigate their clothing with burning sulphur, or, if possible, change clothing before going out among people, and so far as possible to avoid meeting children.⁴⁶

In Topeka three years later, from August to January, 179 homes were quarantined because of a diphtheria epidemic.⁴⁷ Eighty-five percent of the cases occurred in areas with poor sewer systems, an indication that poor sanitary conditions promoted disease spread. Needless to say, some families did not appreciate the stigma and destroyed their quarantine cards. All families were relieved and pleased when the quarantine expired. One

woman recalled her family's excitement in 1894 when the quarantine from her brother's diphtheria was lifted.

That day Mama praised the Lord and fumigated the whole house. And it was on that very day that I came down with diphtheria, and up went the red flag again. Dr. McIlhenny said I was so sick nothing could save me unless it might be the new antitoxin he'd read about in the medical journal. No doctor in Sumner County had used it, he said, but if Papa and Mama wanted him to try. . . .

She was treated and the following day, it had "worked like a miracle, and next morning they were all thanking God."⁴⁸

By the end of the century available therapy was partially successful against diphtheria. For example, in the Topeka epidemic only 14 percent of 259 affected children died. The death rate was the same in areas with and without a good sewer system, suggesting that good sanitation prevented disease transmission but it did not alter the clinical course of the disease. Tracheal intubation was helpful for some severely affected patients. During the Topeka diphtheria outbreak, seven of fourteen patients, who had their breathing assisted with intubation, survived. But the most important therapeutic advance was the availability of diphtheria antitoxin. Serum companies widely advertised the product for sale, and many local

45. Kansas State Board of Health, *First Annual Report*, 101.

46. F. J. Boutin, "Scarlet Fever and Diphtheria in Dickinson County," in Kansas State Board of Health, *Eighth Annual Report* (Topeka: State Printer, 1893), 240.

47. A. W. Vanniman, "Diphtheria in Topeka, 1895," *Kansas Medical Journal* 8 (April 11, 1896): 215-17.

48. Blanche Beal Lowe, "Growing Up in Kansas," *Kansas History: A Journal of the Central Plains* 8 (Spring 1985): 48.

frontier medical journals supported its use. Dr. J. H. Van Eman of Kansas City reported the survival of eight treated patients and the single fatality a girl, who was "all but hopeless when first seen." Another physician concluded that "there seems to be very little danger in the proper use of healthy serum."⁴⁹ Further refinements enabled the successful development of routine diphtheria immunization in the twentieth century.

The single most important cause of infant death was gastrointestinal illness. These conditions had many different names—summer complaint, dysentery, infantile diarrhea, cholera infantum—and causes, but all were characterized by vomiting, diarrhea, and fever. The onset was violent or insidious, and the disease was most severe during the summer months, when dehydration was magnified by water loss from sweating. During 1869-1870, sixty-nine infants and children were buried in Leavenworth following death from gastrointestinal disease. Statewide, as late as 1897, 273 reported children died from cholera infantum.⁵⁰ This was not a complete accounting since all of Kansas' 105 counties did not yet have standardized reporting systems, and equally important, some diagnoses, such as summer complaint, were not included in this tabulation. In hindsight, dehydration and inanition were probably the most lethal problems experienced by these infants. The situation was compounded not only by a lack of treatment, but by the absence of intravenous fluids. Even artificial oral feeding methods were virtually nonexistent. The danger of such problems led one authority to advise mothers not to wean their babies during the summer months, lest infant death be the result.⁵¹

Dr. A. E. Hertzler recorded the plight of a case of "summer complaint."

The cherubic little body is contorted into the most impossible shapes: eyes half open, the balls rolled upward; face twitching and pale or bluish-white. After a few minutes of violent muscular contraction there is slight relaxation and one hopes that it is ended; but not for long, because the contractions soon reappear, perhaps even worse than before. With slight variations this may continue for hours, even days. Usually after a time a diarrhea begins and the child rapidly emaciates, becoming quickly only a skeleton, a mere shadow of its former self. The convulsions are generally absent now, but the temperature rises rapidly, trying the reg-

istering capacity of the clinical thermometer. The child lies panting, head buried in the pillow. The limbs grow cold. There is a slight quiver. The emaciated little limbs suddenly straighten, then relax. The child is dead.⁵²

Each physician offered his own personal dietary recommendations for sick infants. Whether based on milk, water, cream, cholera syrup, or even the roasted sweet potato, all of these therapies were difficult to prepare without sanitary facilities, and all required artificial feeding, which in itself was difficult to accomplish. Many of the "best" therapeutic agents of the day—bismuth, astringents, quinine, bitter tonics, bromides, even opium—were offered as treatment. However, only the last is likely to have been of significant benefit. One doctor concluded that "if the vomiting and purging can be rested, the outlook is hopeful."⁵³ But therapy was not only ineffective, it could also be harmful. Other agents, including emetics and cathartics, were employed, sometimes with disastrous results from enhanced dehydration. One physician reported an infant death that resulted from therapy with the cathartic calomel. He wondered if it was "Murder." "Oh, When shall these things cease to be? When will parents learn that poison is not medicine? When will physicians act consistently, and give innocent remedies, or none—assisting nature when necessary, or do nothing?"⁵⁴ Clearly all were frustrated in an era when doctors did not understand a common disease, and when they had few therapeutic tools with which to help sick children.

Infant Care

Childbirth was another common time for infant death to occur, and the tragedy was compounded when both mother and baby died. During the 1870s thirty-three women were buried in Leavenworth following their deaths during childbirth.⁵⁵ During the same decade four times as many stillborn infants were buried. The latter figure is likely to be an underestimate of the actual occurrence of stillbirth, since unrecorded home burials were not infrequently performed. When both mother and child died, infants were often buried with the mother and not recorded as a separate fatality. Sheldon Anthony of Lawrence reported that an old friend, Phebe Russell, gave birth to a stillborn infant on Thanksgiving Day 1885. Within

49. J. H. Van Eman, "The Antitoxin Treatment in Diphtheria," *Kansas City Medical Index* 18 (January 1897): 1-5; Vaniman, "Diphtheria in Topeka," 217.

50. Records of Mount Muncie Cemetery; Records of Mount Calvary Cemetery; Kansas State Board of Health, *Thirteenth Annual Report*, 80.

51. Thomas Hersey, *The Midwife's Practical Directory; Or Woman's Confidential Friend*, 2d ed. (Baltimore: 1836), 288.

52. Hertzler, *The Horse and Buggy Doctor*, 115-16.

53. Beverly Deshazo, "Cholera Infantum," *American Midwife* 2 (1896): 93-95.

54. Susan E. Cayleff, "Gender, Ideology, and the Water-Cure Movement," in Norman Gevitz, ed., *Other Healers: Unorthodox Medicine in America* (Baltimore: Johns Hopkins University Press, 1988), 85.

55. Records, Mount Muncie Cemetery; Records, Mount Calvary Cemetery.

twenty minutes the mother was "carried to her last resting place." The baby was buried in her mother's arms.⁵⁶

Professional and lay advice abounded about the proper care for the newborn.⁵⁷ Midwives, physicians, family and friends, all offered suggestions. At the minimum, the cord of the neonate was tied, and the child was bathed, dressed, and placed to the breast. One woman recorded the care with which this process was completed.

Washed the baby, dressed him, and got a band and wrapped up that little thing-of-a-cord; greased it with healing sweet oil to keep it soft and right, for it takes three or four days before it comes off—sometimes more. I had more diapers of muslin, some night dresses, and some light-colored petticoats of calico, at 10 cents a yard. I had flannel pinning blankets of soft wool flannel which I'd wrap around his feet. The petticoat was sewed onto a belt. The dress had sleeves. When he was dressed and wrapped up he was just as solid! I don't know whether he was comfortable or not. I guess he was, because he was quiet.⁵⁸

None of these chores were particularly difficult, although one physician reported that washing a newborn baby was a "sleight-of-hand job," because the infants were like "greased pigs." He suggested that:

in order to prevent the baby falling to the floor, I was obliged to grasp one leg firmly with one hand, which left only one available for performing the ablutions. After a few such experiences I carried a bottle of sweet oil and just anointed it all over, rolled it in whatever was available and allowed it to await the ministrations of more experienced hands.⁵⁹

Efforts to resuscitate the newborn were of particular importance, since some merely compromised newborns were considered to be stillborn. One physician noted in 1869 that stillbirth "might often be prevented by scientific effort." He suggested "artificial respiration, by holding the nose of the babe, adjusting my lips to its mouth, inflating the lungs, and then by gently compressing the chest, again forcing the air from them, in imitation of expiration." He successfully resuscitated the infant after "no less time than two hours at the very shortest reckoning."⁶⁰ Such heroic efforts were not always successful, but they did encourage physicians to attempt newborn resuscitation.

Later in the century additional efforts became available to resuscitate the newborn. Such therapy was

not only "prophylactic" but "curative." Physicians were advised to clear the "accumulation of mucus or blood in the nose or mouth." Alternating "hot and cold water" applied to the skin could stimulate the "superficial nerves." Various methods for artificial respiration were offered, and several techniques, including gentle handling, were advised to enhance neonatal survival and to avoid exhaustion for the child. Some techniques were specifically decried by physicians. A Kansas City physician advised against the midwife's traditional treatment of holding the baby upside down by the heels and then giving "a slow, downward movement, as if they would drop," and then "suddenly jerked upwards."⁶¹ If too vigorously performed, this practice injured the child.

Premature birth certainly occurred, but was not often reported as the cause for neonatal death. Only four deaths from this cause were recorded in Leavenworth during the 1870s. More commonly reported were birth defects. Dr. W. S. Bunn of Lawrence was called as a consultant for a complicated birth. The infant had hydrocephalus, "the globe measured 84 centimeters in circumference," nearly twice the expected size. Interestingly, following a "moderate post partum hemorrhage" the mother was reported to be "pulseless for twelve hours, after which the heart gradually resumed the 'even tenor of its way,' and her recovery was uneventful." On another occasion Dr. Lane reported a "monstrosity." At birth the child had "the radius and ulna absent from both arms. The left thumb was attached to the hand by a slender pedicle, and there was complete ankylosis of the hips and knees. The child expired as soon as delivered."⁶² Neither medical knowledge nor available technology permitted intervention in such conditions.

The seemingly simple task of providing diapers and clothes for infants and children was a major problem. Frontier mothers often found diapers scarce, and when they were available they required regular washing and drying. Diaper washing could be a special problem with limited water supplies and busy travel or work schedules for already over-taxed mothers. Consequently other solutions were commonly used. "Some women may have used grass or soft mosses, if these were available, but most evidently resorted to the common, although frequently criticized, practice of simply drying, scraping, and airing the diapers and reusing them."⁶³ This

56. Anthony to Stoddard, Manuscripts, KSHS.

57. Charles R. King, "The Women's Experience of Childbirth on the Western Frontier," *Journal of the West* (in press); Gunn, *New Domestic Physician*.

58. Helen Olson Halvorsen and Lorraine Fletcher, "19th Century Midwife: Some Recollections," *Oregon History Quarterly* 70 (March 1969): 44.

59. Hertzler, *The Horse and Buggy Doctor*, 119-20.

60. J. P. Chesney, "Resuscitation of Asphyxiated Infants," *Leavenworth Medical Herald* 2 (April 1869): 485-87.

61. M. R. Mitchell, "Practical Points as to the Attention to the Child at Birth," *Kansas Medical Journal* 7 (August 10, 1895): 435-37; Willis P. King, *Stories of a Country Doctor* (Kansas City: 1907), 314.

62. W. S. Bunn, "Hydrocephalus in Utero," *Kansas Medical Journal* 6 (September 1, 1894): 454; "Society Proceedings, Leavenworth Medical Society," *Kansas Medical Journal* 2 (March 1890): 391.

63. Sandra Myers, *Western Women and the Frontier Experience, 1800-1915* (Albuquerque: University of New Mexico Press, 1982), 130.



It was not until the late 1800s that the medical establishment gave special study to childhood diseases; and it was not until the early 1900s that children more commonly received hospital care. Pictured are the Topeka Children's Clinic (above) at the turn of the century and a hospital's pediatrics ward in the 1920s.



practice was one reason that infectious and gastrointestinal diseases were common among frontier infants and children.

The frontier physician was expected to be knowledgeable about the essentials of infant care. In summarizing the practical aspects of child care, Dr. A. B. McCandless of Holton, Kansas, noted that many problems "might be avoided by proper attention to those external agents to whose influence the child is subjected." The physician should provide proper direction to the family, because "a very large proportion of the suffering of infancy" could be attributed to the parents. The doctor advised: 1) "pure fresh air"; 2) "scrupulous cleanliness"; 3) "clothing as light as is consistent with due warmth"; 4) mother's milk ("nature does not afford, nor can art supply, a substitute of equal value"); 5) "plenty of good sound sleep"; 6) "well regulated exercise"; and 7) "no medication unless absolutely demanded." He concluded, "if these principles are religiously observed we have health, if not disease."⁶⁴

Perhaps the most important aspect of child care was infant feeding. A fact recognized by the editors of the *Leavenworth Medical Herald* when they published "The Proper Constitution of the Food of Infants" as the lead article in the first issue of a Kansas medical journal.⁶⁵ The value of breast milk as the proper food for the baby was recognized by the author. This was a conclusion that both ancient and modern authorities had reached. Frontier mothers, as for mothers throughout history, were always "delighted to find that the milk has returned in abundance." The failure to establish an adequate supply of milk meant "the baby did not thrive." One woman reported the plight of a friend, who faced this mortal problem.

Rosie had far more milk than the baby could use at first, and her breasts caused her great discomfort and pain. She tried various expedients to secure relief, but without much success. One day Lizzie Graeber suggested that if she would heat a bottle in live steam and hold the opening of the bottle to her breast, the cooling of the bottle would drain the surplus milk. Rosie tried this, but scalded her nipples so badly that she could no longer nurse the baby at all. She would have been willing to endure the pain, but the nipples festered until the baby would not have them.⁶⁶

The baby died and was buried in a "corner of the yard." Such deaths were common before artificial feeding became uniformly available.

Infant feeding commenced immediately after the birth of the child. One woman reported:

64. A. B. McCandless, "The Doctor and Child," *Kansas Medical Journal* 9 (September 25, 1897): 533-35.

65. Albert Newman, "The Proper Constitution of the Food of Infants," *Leavenworth Medical Herald* 1 (June 1867): 1.

66. Ise, "Mother's Recollection of Her Early Life," 41-42.

As soon as I was washed and cleaned up, I had something to eat; a piece of toast with plum butter and a cup of tea. In an hour after I put the baby to the breast. I didn't have any nipples it was an awful job!⁶⁷

Breast feeding women received advice from family, friends, physicians, and domestic advisors to promote the success of their endeavor. Mothers were advised to eat juicy meats, good broths, milk, "really excellent ale," oatmeal porridge, and fresh ripe fruits in order to enhance lactation. Other foods, including fish, pickles, acid fruits, cabbage and onions, could cause problems for mother and baby. If dietary changes failed, Ridge's Food for nursing mothers was available. It was especially useful for mothers "reduced by overtaxing of the nervous force." Many other remedies were offered that promoted milk flow and eased tender breasts. Sweet oil was kneaded into the breast, or a poultice made with hot pancakes that had extra salt and turpentine baked into them could be applied. As a last resort women could apply Dragg's Arctic Liniment, which was good for "man and beast." This "mother's companion" was guaranteed to cure "cakes in the breast [and] sore nipples."⁶⁸ A successful therapeutic result could mean the difference between life and death for the infant of an affected woman.

Before artificial feeding became routinely available at the end of the century, a wet nurse was the only means to prevent infant death when a mother could not nourish her child. One physician emphatically stated that the only substitute for breast milk was "a healthy and judiciously fed nurse." Successful and reliable women to fill this role were in much demand. Wealthy families had traditionally employed a servant, and relatives provided the nourishment in many other families. An honest woman, who was "clean in body and life," was "beyond price."⁶⁹ Nonetheless families remained afraid of disease transmission and the possible loss of the infant's food source should the woman choose to leave. Fortunately, by the end of the century artificial feeding had replaced the need for the wet nurse in the majority of instances.

When artificial feeding was necessary, many different formulas were advised. Pure water, but not ice which transmitted bacteria, might be used. Goat's milk or watery pap also could be tried. But formulas composed of multiple ingredients were more popular.

67. Halvorsen and Fletcher, "19th Century Midwife," 45.

68. Mary Terhune, *Eve's Daughter; or, Common Sense for Maid, Wife, and Mother* (New York: 1882), 24-25; *Leavenworth Times*, May 15, 1858, and October 7, 1884, advertisement; Janet Lecompte, ed., *Emily: The Diary of a Hard-Worked Woman* (Lincoln: University of Nebraska Press, 1987), 93; William E. Koch, *Folklore from Kansas, Customs, Beliefs, and Superstitions* (Lawrence: Regents Press of Kansas, 1980), 53.

69. R. R. Livingston, "Mortality of Infants," *Leavenworth Medical Herald* 1 (December 1867): 292; Terhune, *Eve's Daughter*, 33.

These formulas were frequently compounded with milk, which might be thickened with "flour, arrow-root, sage or tapioca or grated crackers," or mixed with water and sweetened with sugar; or barley water could be compounded with milk and sugar to create a mixture that "strongly resembles human milk in color, taste and consistence."⁷⁰

Artificial feeding was most often unsuccessful because bacterial contamination of cow's milk transmitted disease to hungry infants. The primitive sanitary conditions under which dairy farming was conducted are illustrated by the recollections of a mid-western farm boy.

If you could go back with me and see our cows, or barn, the milk pails and cans, and our lack of facilities for keeping milk cold, you would doubtless have been convinced that no baby could survive such unsanitary milk. It is my belief that I could have survived being fed on milk contaminated with stable filth. It was the cloth strainer which a baby could not compete with by his defense mechanisms. We rinsed the strainer after pouring the morning's milk through it, and hung it up to dry. In summer, fifty or more flies would alight on it within a minute and feed upon the milk residues, speckling it with fly-specks. In the evening, the fresh milk was poured through this fly-excrement-laden cloth. A baby could scarcely ever fail, when fed such contaminated milk, to suffer from diarrheal infection and die.⁷¹

Artificial foods for infant feeding were also available. Imperial Granum was advised for infants and mothers. Its use was reported from Fort Scott, Kansas. "We have used it with the best possible results in several cases of summer diarrhea in children." Horlick's Food for infants required no cooking, was available from all druggists, also could be used for invalids, and agreed with baby "perfectly." Lactopeptine, which was described as the most important remedial agent ever presented, was also useful for morning sickness.⁷² In the final analysis these products may have saved the lives of some infants, but survival for most was based on the development of a nutritious, liquid artificial formula that could be prepared and administered in a sterile fashion.

Conclusions

Recognition of the importance of the unique health needs of children led to the establishment of

⁷⁰ "Editorial," *Kansas and Missouri Valley Medical Index* 4 (April 1883): 118.

⁷¹ E. McCollum, "Response," in *Nutritional Ages of Man: Proceedings of the Borden Centennial Symposium on Nutrition* (New York: 1958), 124.

⁷² Advertisement, *Kansas Medical Journal* 9 (July 10, 1897): iii; *Leavenworth Times*, December 12, 1884; advertisement, *Kansas City Medical Index* 11 (June 1890), 3.

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pediatrics as a medical specialty. By the end of the nineteenth century, under the leadership of the New York physicians, Abraham Jacobi and later Emmot Holt, the new medical specialty had reached the then closing Kansas frontier. In the process both physicians and the public began to recognize the importance of specialized health care for children. Improved sanitary measures, enhanced public health, safe milk supplies, and better knowledge of childhood growth and development were among the results. In the early twentieth century, social legislation and public education programs were started to incorporate the gestating scientific principles of child development and medical practice into a successful campaign to reduce infant morbidity and mortality. Improved infant and child health was the result, and fewer "empty chairs" were found at the family table.

[KH]