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Cameron-Vendrig, Julia

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THE CHILD HYGIENE MOVEMENT: PUBLIC SCHOOL HEALTH PROGRAMS IN NEW YORK CITY, 1867-1918

JULIA CAMERON-VENDRIG

SUMMARY: During the first half of the nineteenth century, the New York City Department of Health was rocked by repeated epidemics of infectious diseases thus forcing them to take extraordinary counter measures to combat these epidemics. However, between outbreaks, the Department of Health became indifferent to the threat of deadly epidemics. Over the following decades, the first school health initiatives were expanded into a comprehensive program. Initially, similar to public health efforts elsewhere, it focused on maintaining sanitary environments and vaccinating children. By the 1900s, with growing knowledge of bacteriology, a more ambitious periodic health inspection program was underway; it involved regular inspections of school children for both infectious illnesses and physical deformities. The program also emphasized education of both students and their families. Under the leadership of Dr. Sara Josephine Baker (1873-1945), the school health program inspected and diagnosed many school children, but by the 1920s concerns were being raised about its effectiveness, as few children had been treated for their ailments. At the same time, budget restrictions and political apathy meant that the school health program soon faded in importance.

KEYWORDS: School Health Services, Child Health Services, Public Health, New York City, Health Education, History 19th Century, History 20th Century.

PRECEPTORS: Drs. E. Jane Errington & Jackie Duffin ■

INSTITUTION: Queens University

Introduction

New York City is an awe-inspiring place to the thousands of visitors it welcomes from around the world each day. In addition to being a city of art and culture, the challenges that municipal politicians have to deal with in New York City (NYC) are remarkable. The municipal government is faced with formidable tasks related to the logistics of caring for and serving such a large and varied population every single day. In the area of

public health, challenges faced by NYC have ranged from the control of agricultural animals in the seventeenth century to promoting Human Immunodeficiency Virus (HIV) screening in the twenty-first century. The NYC Health Department was first created in 1805 and has been the primary mechanism by which the city responds to disease outbreaks and unsanitary conditions. As it grew from a largely reactionary organization to one that attempted to anticipate problems and promote good health, it launched many long-standing programs to address various public health concerns.

A series of initiatives to address school children's health began in 1867 with attempts to control disease outbreaks. The crowded and unsanitary conditions at NYC public schools provided a breeding ground for infectious diseases, and afforded many potential opportunities for the Health Department to intervene. What began as a movement to improve building conditions and vaccination rates expanded into a comprehensive health program, which included regular health inspections and instruction for pupils and their families. By 1908, a separate Bureau of Child Hygiene had been created and its school programs included regular health inspections of school children, vaccination programs, and health education for children, parents, and teachers. The development of school health programs from 1867 to 1918 will be discussed in this paper. Drawing from contemporaneous handbooks and pamphlets as well as secondary resources allows one to begin to identify the incentives and inspirations for the creation of various aspects of the school health programs. A number of the barriers to the development of school health programs will also be discussed.

The Beginning of Public School Health Programs

As early as the 1650s, the municipal government of NYC created legislation to protect property and promote general health, for example, laws regarding the control of animals and the construction of buildings.¹ However, there were few major public health initiatives until the population began to grow rapidly in the eighteenth century. As the population of NYC grew, so did the quantity of human waste and garbage. This made the living conditions in the city very crowded and thus increased the danger of contracting contagious diseases. The tenement

¹ John Duffy, *A History of Public Health in New York City, 1866-1966* (New York: Russell Sage Foundation, 1974), pp. 611-613.

houses in particular were crowded and foul and a focal point for illness.² However, they were geographically and socially removed from the city councillors and the upper class citizens, and thus the conditions were generally ignored.

In the eighteenth century, periodic outbreaks of smallpox, yellow fever and Asiatic cholera threatened the city. While outbreaks were most devastating to the crowded tenement dwellers, their effects spread beyond the slums and stirred the city into action.³ The failure of quarantine alone to prevent yellow fever outbreaks led the city's Common Council to realize that control over sanitary conditions was required; in 1805, the first NYC Health Department (then the "Board of Health") was established.⁴ At the same time, the "sanitary movement," which theorized that diseases originated in and were promoted by filth, was becoming widespread.⁵ The Board of Health now had specific areas on which to focus. However, although the Board acted in the name of science, it was largely composed of politicians and seems to rarely have had direct access to scientific or medical advice. By targeting filth and grime in NYC, they were indeed helping to protect citizens from illness. At the same time, they may have been gratified that this new scientific knowledge supported their wish to purge the tenements and increase the distance between the filth and their own families. For the next 60 years, the Board of Health played a largely reactionary role.

During epidemics, the Board evacuated residents, treated patients, and provided help to relocated families. Between outbreaks, however, the Board rarely met, the city lapsed back to the previous unsanitary conditions, and the situation in the tenements continued to deteriorate.⁶ The Board was also subject to political and economic influence. For example, in the 1831 cholera outbreak, the city was afraid of disrupting commerce and trade so they delayed announcing that the epidemic had reached NYC.⁷

By the late 1850s, citizens were calling for establishment of an independent health department, and in 1866 the state legislature created the Metropolitan Board of Health. Perhaps most importantly, the state

² *Ibid.*, pp. 612-614.

³ *Ibid.*, pp. 615.

⁴ Marian Moser Jones, *Protecting Public Health in New York City: 200 Years of Leadership: 1805-2005* (New York: The New York City Department of Health and Mental Hygiene, 2005), p. 4.

⁵ John Duffy, *A History of Public Health*, p. 615.

⁶ Marian Moser Jones, *Protecting Public Health in New York City*, p. 7.

⁷ *Ibid.*

required that three members of this Board be physicians, thus removing some power from politicians.⁸ In 1870, restructuring led to the creation of a new Health Department – similar to the 1866 board, but with members being appointed by the mayor.⁹ The renewed municipal public health councils of the 1860s and 1870s were able to enact a more consistent agenda than the reactionary Board of Health of the early nineteenth century. Although it was still subject to the procrastination of human nature and the delays of bureaucracy, the new Health Department was able to develop long-term goals and, to varying extents, carry through on these plans. Furthermore, having physicians on staff helped promote medically sound decisions.

Until the late 1860s, the Health Department did not concern itself with public (or private) schools in its defences against illness. In 1867, however, the public schools became a focal point for an outbreak of smallpox. The schools were crowded and, although the city offered free vaccination clinics, not all students were vaccinated. In March 1867, a survey of school children in NYC and Brooklyn (then a separate municipality) determined that 4 percent of school children were not vaccinated and in some schools this was as high as 50 percent. This led the Board of Health to declare that the sanitary inspector would visit each school twice a year to ensure that all children and teachers had a certificate of vaccination.¹⁰ In 1870, smallpox returned, and the school board cooperated with the Board of Health by requiring vaccination for all students.¹¹ In 1875, the Board of Education also passed a law requiring all school janitors and their families (who often lived in school buildings) to be vaccinated.¹² Thus, the Department had begun a foray into school health that would become a major initiative over the following decades. During their visits to the schools, inspectors quickly realized that the overcrowding of school buildings was a danger to its students' health.¹³

Citizens of NYC also became increasingly aware of unsanitary conditions in their schools. The buildings lacked proper ventilation and toilet facilities, and the situation was aggravated by packing too many children into each classroom.¹⁴ Public interest in improving school building conditions was at times vocal, but openness to wide-scale change

⁸ *Ibid.*, p. 12.

⁹ *Ibid.*, p. 16.

¹⁰ John Duffy, *A History of Public Health*, p. 148.

¹¹ *Ibid.*, pp. 148-149.

¹² *Ibid.*, p. 71.

¹³ *Ibid.*, p. 214.

¹⁴ *Ibid.*, p. 215.

did not necessarily follow quickly. In 1869 the *New York Times* denounced the conditions. Although the education budget was clearly inadequate, the *Times* did not advocate more funding; instead, it suggested that wealthy citizens send their children to private schools, thus freeing space in the public schools.¹⁵ This hints at reluctance on the part of NYC's leaders to direct more funds towards the public schools. Voters, whose children attended private schools, were not inclined to agree paying higher taxes to fund programs to improve sanitation in public schools; there was little incentive for the mayor's office to take any serious action.¹⁶

Despite the righteous outbursts from newspapers and activist citizens, such as the *Times* report above,¹⁷ there were no large-scale changes to school building conditions for several years. As the population continued to grow, school conditions continued to deteriorate. In 1894, a sanitary inspector published a report of the conditions in all schools. The report from Grammar School No. 36 (No. 710 East Ninth St.) was typical: there were 1653 pupils in 35 classes, an average of 47 students per class. The school was described: "Exits poor; two rooms in the Primary dark, one room very obnoxious, urinals on both sides; air in this room bad; sickness prevailing. Two rooms no desks."¹⁸ Throughout the city, the inspector found several classrooms without furniture. The classes were often overcrowded, and in many, the teachers competed with nearby factory and rail lines to be heard. There were foul odours from toilets and burning gas (few had electricity), and the rooms were poorly ventilated or draughty. The conditions in Grammar School No. 39 (No. 235 East 125 St.) led the inspector to exclaim "Babel let loose!"¹⁹ In such conditions, it is easy to imagine that infection spread easily. While the vaccination programs helped decrease the incidence of some illnesses (smallpox, for example), minor infections such as head lice and skin rashes continued to fester among public school students.

¹⁵ *Ibid.*

¹⁶ *Ibid.*, pp. 213-214 and p. 217.

¹⁷ *Ibid.*, p. 215.

¹⁸ Charles Wehrum (1894), in: Diane Ravitch, *The Great School Wars, New York City, 1805-1973; A History of the Public Schools as Battlefield of Social Change* (New York: Basic Books, 1974), p. 138.

¹⁹ *Ibid.*

The Board of Health and the Board of Education

While many agreed that school children's health could not be protected until building conditions were significantly improved, there were several bureaucratic barriers: The process of requesting and receiving funds was complicated and often hampered by corruption. In the 1880s, a sanitary inspector for the Board of Health informed the Board of Education that children's health was endangered, and that the majority of schools required heating and ventilation changes. The Board of Education requested funds from the mayor's office, but was only given half of what it needed.²⁰ This was because, while the Board of Education could make decisions regarding policy, local trustees were largely responsible for school construction projects and maintenance. Furthermore, the trustees controlled the funds from the Board of Estimate and Apportionment.²¹ Corruption was another reason behind the deplorable conditions of school buildings. In 1892, the Board of Education discovered that inferior materials were being used, cheap construction was being overlooked, and contractors were being paid for incomplete work. The Board of Estimate and Apportionment promptly shut down this investigation. In fact, within a few months the Board of Education was at the centre of another investigation, in an attempt by the mayor's office to shift the blame to the Board of Education.²²

At first, the barriers of bureaucracy, corruption and limited funds were insurmountable for the advocates of improving school conditions. By the late 1880s and early 1890s, however, support for better school conditions was growing. The Medico-Legal Society of New York, which had been battling for school health for several years, earned the favour of the New York Academy of Medicine and the Medical Society of the County of New York.²³ With the power of these groups directed at improving school conditions, the fight was properly under way. In an effort to promote good health and have a report of school conditions from the inside, some groups advocated having an inspector visit the schools regularly.²⁴ Not only could such a person report unhygienic building conditions, but the inspector could also report on the health of the building's occupants. In 1804, the merchant and philanthropist John Pintard (1759-1844) had been appointed by the Board of Education as the first "City Health Inspector" in

²⁰ Diane Ravitch, *The Great School Wars*, p. 120.

²¹ John Duffy, *A History of Public Health*, p. 214.

²² Diane Ravitch, *The Great School Wars*, p. 121.

²³ John Duffy, *A History of Public Health*, p. 216.

²⁴ *Ibid.*, p. 215.

New York.²⁵ Originally appointed to investigate teachers, who were absent due to sickness, subsequent health inspectors (who in the majority had been physicians) became also instrumental in organizing a massive school vaccination during the 1872 smallpox outbreak.²⁶ Despite its success, the position of school health inspector was abolished soon after. The Department of Health did appoint an inspector in 1887, but he also only lasted one year; the Board of Education resented the Department of Health's interference and position was soon abolished.²⁷

In the 1890s, the interest in school health inspectors continued, and a larger role was envisioned for the proposed inspectors. The growing knowledge of bacteriology led also to a continuing interest in the notion of inspecting school children for infectious diseases. In this way, the Health Department hoped to slow the spread of infectious bacteria. The growing support for improving school health in general made the goal of having school inspectors seem feasible, and infectious outbreaks in the 1890s sped this process along. In the spring of 1895, outbreaks of scarlet fever and diphtheria closed two schools; later that year, the Health Department's Sanitary Superintendent recommended daily medical inspections of all school children.²⁸

Because the recommendation came from so high up within the Health Department, the necessity of having school medical inspections was finally taken seriously. A Health Department inspector was asked to investigate the problem and supported the suggestion of assigning health inspectors to public schools. The inspector's report found that children continued to attend school even though they were sick or convalescent, thus exposing classmates to infection. Encouraged by growing advocacy, the Health Department reappointed a school medical inspector in 1893.²⁹ This time, the importance of the role of the inspector was more widely recognized, the position was less prone to political opposition or apathy, and the school health program began to grow beyond vaccination and building conditions. In 1897, a Division of Medical School Inspection was created; indicating the established importance of this role; a chief medical school inspector and approximately 125 part-time inspectors were appointed.³⁰

²⁵ Edwin G. Burrows and Mike Wallace Gotham, *A History of New York City until 1898* (New York, Oxford: Oxford University Press, 2000), p. 358.

²⁶ *Ibid.*

²⁷ *Ibid.*, pp. 216-217.

²⁸ *Ibid.*, p. 219.

²⁹ *Ibid.*, pp. 217-218.

³⁰ *Ibid.*, p. 219.

Sara Josephine Baker

More than thirty years after advocates began calling for school inspections, a team of qualified inspectors was finally in place through the Health Department. Unfortunately, the School Health Program continued to be hampered by the ineffectiveness of these inspectors. Other than the chief inspector, all school inspectors worked part-time, and it was suggested that some barely worked at all. Dr. Sara Josephine Baker (1873-1945), who later became active in the child and maternal health field, was an early school inspector. According to Dr. Baker, many inspectors neglected to visit the schools and questioned the principals by telephone instead. Even if a disease were uncovered, little action was taken.³¹ If the inspections were carried out, there was also no guarantee that useful action would result. According to John Duffy (1915-1996), a historian of American public health, “the chief aim of the inspection was to keep those children with communicable infections out of school, and virtually no effort was made to see that they received treatment.”³² In part, this policy was an indication of the reluctance of the Health Department to interfere with the work of private physicians.

Excluding children with communicable illness was effective in the short term, but without treatment, the children’s illnesses were unlikely to resolve, and they would eventually return to school. Furthermore, eliminating all children with infectious conditions would depopulate the schools. Thus, officials decided to treat some conditions on site. This was possible with the support of Mayor Seth Low (1850-1916), who came into office in 1902.³³ Unlike his predecessor, Low and his administration supported immediate action to improve school conditions.³⁴ As part of the new initiative to treat children in the public school setting, nurses were hired by the Department of Health in 1902. They were to treat head lice, eye and skin infections, and to visit pupils’ families at home. Also in 1902, the position of school inspector became full-time.³⁵ In 1905, the routine weekly inspection was handed over to nurses, so that medical

³¹ *Ibid.*, p. 476.

³² *Ibid.*, p. 246.

³³ *Centennial Classroom, Elected Mayors of NYC, 1898-1998*; retrieved 30. May, 2009 (http://www.nyc.gov/html/nyc100/html/classroom/hist_info/mayors.html#low).

³⁴ John Duffy, *A History of Public Health*, p. 475.

³⁵ *Ibid.*, p. 254.

inspectors could devote more time to thorough examinations of children in need.³⁶

Thus, by 1905 the foundations of the school health program were firmly established, with full-time physicians and nurses appointed to work directly with school children. John Duffy states, “By the early twentieth century the infant welfare and school health movement was in full swing.”³⁷ Having successfully convinced others of the importance and necessity of the school health program, advocates now turned their attention to improving the effectiveness of the program. Prior to 1908, school medical inspections were supervised by district inspectors from the Division of Contagious Diseases, a part of the NYC Health Department. However, school medical inspections were becoming more complex and systematized, and it was suggested that a separate division could be more effective in running school health programs. The Division of Child Hygiene was created in 1908, and in 1913 it was upgraded to a Bureau, with its director reporting directly to the Commissioner of the Department of Health.³⁸ This allowed for more autonomy and for more time to be devoted to improving the program. Dr. S. Josephine Baker, who had previously worked as a school medical inspector, was the first Director of the Division of Child Hygiene.³⁹ Dr. Baker’s role extended well beyond school health; under her guidance, this Division initiated several new public health and preventative health programs aimed at improving the health of NYC’s youngest, as well as actively promoting maternal health. In 1915, the Bureau of Child Hygiene regulated midwives, initiated several programs to reduce the infant mortality rate, cared for abandoned infants, supervised nurseries and institutions for state-dependent children, ran medical inspection of school children, and enforced some aspects of the Child Labour Law.⁴⁰

As the school health program’s capacity and scope increased, it became established in the municipal legislation. School inspections were no longer a vague ideal – they were considered a part of the basic provisions of public health. By 1911, all children required medical examinations and health certificates when entering and graduating public school; this was stated by the Health Department’s Sanitary Code, Section

³⁶ *Ibid.*, pp. 477-478.

³⁷ *Ibid.*, p. 466.

³⁸ *Ibid.*, p. 480.

³⁹ Marian Moser Jones, *Protecting Public Health in New York City*, p. 23.

⁴⁰ Sara Josephine Baker, *Rules and Regulations and Methods of Procedure of the Bureau of Child Hygiene* (New York: The Martin B. Brown Company, 1915), pp. 1-2.

200 (“Physical Care of School Children”). A licensed New York State physician had to complete this certificate, while a Department of Health medical inspector examined children but could not produce a certificate.⁴¹ Between admission and graduation, additional medical inspections were performed on children with a particular need, or on healthy children when there were sufficient personnel available.⁴² There are clearly gaps in this medical coverage: children without a visible illness could go for over ten years without a health inspection if there were not sufficient personnel. However, the fact that school health inspections were required by law suggests that school health was a significant concern of municipal politicians.

A contemporary author stated: “the whole fabric of our social order is threatened unless the science of prevention substitutes the science of alleviation”.⁴³ He went on to argue the importance of school health inspections in improving the economy: “if ignored, ill health leads to absence from school, causing school failure, which is an increased expense to the taxpayer as the child must repeat the year”.⁴⁴ With these values in mind, the school health inspectors worked to detect illness and facilitate early treatment.

The Bureau of Child Hygiene

With municipal legislation in place to protect the foundations of their program, the Bureau of Child Hygiene began to improve and codify their methods. More stringent internal regulations from 1915 onwards resulted in a program that aimed at both detecting and preventing illness, to decrease the spread of infectious diseases and to identify physical abnormalities before they interfered with normal development. The details of the school health program are described in a 1915 booklet for Bureau of Child Hygiene employees; this publication describes the areas under supervision of the Bureau as well as the roles and responsibilities of the employees.⁴⁵ The protocol for the health inspection of school children provides insight into the priorities and beliefs of the senior administration in the Bureau of Child Hygiene. They were concerned with screening all

⁴¹ *Ibid.*, pp. 143-144.

⁴² John Duffy, *A History of Public Health*, p. 481.

⁴³ Edward F. Brown, *The Health Supervision of the School Children of New York City* (New York: New York City Department of Health, 1914), p. 7.

⁴⁴ *Ibid.*, pp. 8-9.

⁴⁵ Baker, *Rules and Regulations*, pp. 1-2.

children for infectious diseases, promoting parental responsibility and educating children and their caregivers about child health.

In addition to children admitted to school for the first time, inspectors examined all special cases as referred by schoolteachers, principals, or nurses. Inspectors then moved on to examine all other school children, beginning with the youngest. Furthermore, children participating in athletic competitions were examined on special request of the principal. Pupils transferred from other schools were also examined, unless they had had a medical examination within the past two years.⁴⁶ This prioritization shows that the Bureau of Child Hygiene now focused its attention on children in need and children who did not have prior medical care.

The nurses were more numerous and in closer contact with schools than the inspectors, and so they examined children on a more regular basis. They provided an important function beyond that of the teachers, who saw the children often but were untrained, and the physician inspectors, who were trained but unfamiliar with the children. The nurse was to inspect each child at least once a month, thus filling the gap between examinations by the inspector.⁴⁷ The nurses examined children, who had been referred by their teachers for reasons such as having been absent for an unknown reason, those returning after an illness, and those in need of treatment for a contagious eye or skin condition. Another important role that the nurses played was that they were able to provide treatment for minor conditions on the spot.⁴⁸

At the beginning of each term, inspectors also made a cursory examination of all children in their districts. This consisted of all children showing their hands, open mouths, and lower eyelids to the inspectors. Girls were instructed to lift their hair to expose their necks.⁴⁹ The cursory nature of this exam was likely due to a combination of factors, in particular the limited resources of the Bureau of Child Hygiene and the reluctance of the Health Department to impinge on the territory of private physicians. The procedure described above was intended primarily to detect infectious diseases.

In 1913, the Division of Child Hygiene felt that it was making progress in the prevention of infectious diseases, and resolved to make an effort to tackle physical defects.⁵⁰ The scope of school health inspections expanded to include examining children for the following physical abnormalities:

⁴⁶ *Ibid.*, pp. 158-159.

⁴⁷ *Ibid.*, p. 165.

⁴⁸ *Ibid.*, p. 162.

⁴⁹ *Ibid.*, p. 159.

⁵⁰ Duffy, *A History of Public Health*, p. 483.

defective vision, hearing, teeth, or nutrition; defective nasal breathing, hypertrophied tonsils, cardiac, pulmonary, and nervous diseases, orthopaedic defects, and “defective mentality”.⁵¹ Although inspectors were asked to make thorough examinations, they were limited by social conventions. For example, girls had to be examined with their shirts on, unless the parents were present or explicit written permission was given.⁵²

Shortly after the beginning of the First World War, inspectors diagnosed head lice, tonsillitis, eye infections, skin infections, diphtheria, scarlet fever, measles, varicella, whooping cough, and mumps. Children with smallpox, diphtheria, scarlet fever, measles, varicella, pertussis, mumps, or pulmonary tuberculosis were excluded from class, as were children with eye or skin infections in a contagious stage, and children with head lice. To enforce the exclusion of children with the above-listed conditions, pupils required the Health Department’s written permission before returning to school.⁵³

Scrutinizing Treatment Options for City Children

Although the scope of the school health inspection was broadened, the physicians and nurses were not able to treat all the conditions that they were now expected to identify. They did, however, make an attempt to ensure that the childrens’ parents sought treatment, and also used this as an opportunity to educate them. If any physical defects were found, a report was sent home to the parents. If no action was taken within three days, and the medical inspector did not receive notice that a respective child was under medical care, the child’s parents were asked to come in to the school. Here, they were educated about the defect and the necessity of taking action. If the parents still did not take action, the school nurse visited the family at home to further their education. If the conditions of the home suggested that the family was delaying treatment because of financial difficulties, the nurse would refer them to a free clinic.⁵⁴ Again, this was an opportunity to educate parents about how to provide a healthy environment for their children. Nurses were expected to provide detailed advice about care options for the children, including how to ensure proper ventilation, nutrition, and cleanliness. The children’s daily routines were

⁵¹ Baker, *Rules and Regulations*, pp. 154-155.

⁵² *Ibid.*, p. 155.

⁵³ *Ibid.*, p. 150.

⁵⁴ *Ibid.*, pp. 156-157.

assessed, and information was given regarding the proper balance of sleep, recreation, and work.⁵⁵

Although the school health program focused on diagnosis rather than treatment, nurses were able to refer parents to some free clinics. Removal of adenoids and tonsils, tooth repair, eye refraction and contagious eye and skin diseases were all treated for free at clinics associated with the Health Department. The nurse could also put the family in contact with other helpful agencies.⁵⁶ After a child was treated, he or she was re-examined by the inspector, and his or her condition was recorded. If it were not satisfactory, the child was asked to return in a month's period, and if it remained unsatisfactory then the nurse was asked to inform the parents.⁵⁷ In cases, where school life was thought to contribute to the physical defect, inspectors were to advise teachers on how to best accommodate these children.⁵⁸ This detailed system was designed to ensure that physical deformities as well as infectious conditions were addressed, and that all opportunities for education were seized. It also demonstrates how the Bureau of Child Hygiene had a growing focus on health education.

As well as being a practical way to reach all children, directing public health efforts towards the public schools provided an audience for health education: In the 1910s, social reformers worked with schools to educate the public. Social workers, philanthropists, and progressive intellectuals worked with organizations such as the Public Education Association to pursue "preventative social work."⁵⁹ These reformers were appalled by the conditions at home, and sought to expose the children to more wholesome influences at school. They advocated for longer school days and years, in order to increase this positive exposure.⁶⁰ To quote Diane Ravitch, a research professor in education from New York University, from her book *The Great School Wars*: "New York's public schools had been founded, after all, to improve society and to salvage the children of wayward parents."⁶¹ As well as removing children from the dubious influences of their parents, and providing a wholesome atmosphere, the school health program involved specific health education components. After routine classroom inspections, nurses were expected to instruct the children on some aspect of hygiene. The topics were to vary, and included

⁵⁵ *Ibid.*, p. 167.

⁵⁶ *Ibid.*

⁵⁷ *Ibid.*, p. 157.

⁵⁸ *Ibid.*, p. 156.

⁵⁹ Ravitch, *The Great School Wars*, p. 191.

⁶⁰ *Ibid.*

⁶¹ *Ibid.*, p. 234.

personal cleanliness, care of the mouth and hair, and also drew on the importance of fresh air and proper ventilation. The teachers were furthermore involved in promoting individual health. They inspected children for head lice and taught cleanliness and nutrition.⁶²

Dr. Baker, as head of the new Division of Child Hygiene, realized the importance of teachers and principals in promoting children's health. She asked school inspectors to lecture on the recognition and identification of general health problems and also began to circulate a newsletter to help teachers educate children.⁶³ The inaugural edition of *School Health News* explained that the volume was intended to provide a common resource for educational and health care professionals; it also recognized that, although the two groups had common interests, they had often bickered about territory.⁶⁴ The publication had been a joint effort of the NYC Department of Health and the Board of Education, and was intended for the public school teachers. There were a wide variety of topics, including teachers' own health situation, general topics to teach to children, and health trivia.⁶⁵ The wide variety of topics in *School Health News* reflects the wide-ranging and optimistic goals of NYC's school health programs in the late nineteenth and early twentieth centuries. Beginning with broad and basic plans such as vaccination and sanitary buildings, school health soon became a large component of the Health Department's efforts, with specific plans and complex regulations. It is hard to separate the effects of the school programs with the effects of the general improvement in public health. Nonetheless, from 1903 to 1905 the number of children excluded from school dropped by two-thirds (from 65 294 to 18 844), and a part of this success can be attributed to the advances in the school health programs.⁶⁶

A detailed and rigorous protocol for health inspections of school children was developed, as described in the previous pages above. However, this ideal was not always reached. In 1913, only 37.3 percent of school children were examined. The sheer numbers facing the school health inspectors were daunting: there were 714 schools and 756,078 pupils over 331 square miles.⁶⁷ Furthermore, children were often diagnosed without ever receiving treatment for their medical conditions.

⁶² *Ibid.*, p. 191.

⁶³ Duffy, *A History of Public Health*, pp. 480-481.

⁶⁴ Bureau of Public Health Education, *School Health News* (New York: Department of Health, 1915), p. 3.

⁶⁵ *Ibid.*

⁶⁶ Duffy, *A History of Public Health*, p. 478.

⁶⁷ Brown, *The Health Supervision of School Children*, p. 1.

Of the students examined in 1913, 69.7 percent were diagnosed with a defect, but only 23.9 percent of these defects were corrected.⁶⁸ This was likely due in part to the expense of obtaining medical care. The school health program only treated minor afflictions such as head lice, while the Health Department's free clinics offered some additional services, because there were still many treatments that poor families could simply not afford.

The criticism that children were diagnosed but not treated came from within the Bureau of Child Hygiene as well as from external reviews. Dr. Baker, an advocate for maternal and child health in general, had long argued that preschool-age children should be an area of concentrated attention. In 1939, she published a memoir reaffirming this belief and stated her opinion that the school medical inspection system had been largely ineffective.⁶⁹ In part, this was because so much attention was focused on diagnosing physical defects, and so little on treating them. At the same time, there was much duplication in the inspection system, and few groups working on treatment.⁷⁰ Dr. Baker's critique, coming from a passionate advocate for maternal and child health, suggests that, while the school health programs were admirable, they were perhaps not the most effective way to combat childhood illness.

The Decline of Child Health Programs

In addition to the difficulties of managing a large program with limited funds and a vast population of disadvantaged children, the NYC Bureau of Child Hygiene also faced challenges from external forces. As well as dealing with outbreaks of disease in the public schools, the Bureau reacted to public health threats that affected all of NYC, and was subject to the Health Department in cases of city-wide concerns. Over the summer of 1916, a devastating polio epidemic swept through the city, and the Health Department ordered that the schools delayed opening in September of that year.⁷¹ In this case, the Department acted to promote children's health. Although it was itself subject to considerable political and societal influence. During the 1918 influenza pandemic, the Commissioner of the Health Department (the homoeopathic physician Royal S. Copeland, 1868-1938) kept the public schools open to "maintain public morale."

⁶⁸ *Ibid.*, pp. 3-4.

⁶⁹ Duffy, *A History of Public Health*, p. 491.

⁷⁰ *Ibid.*

⁷¹ Moser Jones, *Protecting Public Health in New York City*, p. 26.

Afterwards, he was criticized for failing to adequately respond to the outbreak.⁷²

The Bureau of Child Hygiene occasionally faced opposition from the school officials, in addition to political criticisms, while both groups intended to protect children's well-being, there were breakdowns in communication and arguments about the many protocols which hampered efficiency. Dr. Baker, in response, made regulations to enforce cooperation between the two sides. School inspectors and nurses were required to cooperate with school officials, and to keep accurate data in a location accessible to school authorities. At the same time, inspectors were required to inform and advise the schools about maintaining hygienic conditions as well as a curriculum that would promote the children's health.⁷³ This may be considered a case of too many people acting at the initial level of diagnosing children, but too few taking action to cure these children.

Despite the challenges and limitations mentioned above, NYC boasted a school health program that was the envy of early twentieth-century North American school. John Duffy states that the Bureau of Child Hygiene "had achieved national recognition during Dr. Josephine Baker's tenure."⁷⁴ A passionate advocate and a meticulous leader, Dr. Baker envisioned and enforced many new programs in her role as Director of the Bureau of Child Hygiene. In 1918, when Royal Copeland became Commissioner of the Health Department, the Bureau of Child Hygiene suffered a big blow: Dr. Copeland and his successor were not as supportive of the Bureau as previous Commissioners had been, and the child health programs failed to thrive in the 1920s. In 1923, the Bureau suffered a further blow when Dr. Baker resigned. While she claimed to be resigning due to ill health, the Department of Health had been in a general decline for several years, and she may have also been frustrated about the ensuing political situation.⁷⁵ The decline was not limited to the Bureau of Child Hygiene. On November 17, 1927, the bacteriologist and public health expert Charles-Eduard Amory Winslow (1877-1957) wrote in the New York Times:

Ten years ago it was beyond question that New York City had the best municipal health department in the world. In 1918 came a change, and for

⁷² *Ibid.*, p. 29.

⁷³ Baker, *Rules and Regulations*, p. 144.

⁷⁴ Duffy, *A History of Public Health*, p. 312.

⁷⁵ *Ibid.*, p. 301.

the first time in thirty years the blight of political influence fell upon the splendid social machinery.⁷⁶

As well as the changes in administration after 1918, school health programs changed with evolutions in health care, education, and the population of NYC. For example, the growing role of private physicians in the 1930s and 1940s led the Health Department to scale back the number of child health stations.⁷⁷ More and more school children were seeking medical care outside of the school environment. At the same time, the Depression led to increasing role of charities, providing another venue to access health care outside of the school system.⁷⁸

Conclusion

Although much has changed over the past hundred years of general public health programs, there are many common elements, and many of the central goals and challenges remain the same. Public health leaders in late nineteenth and early twentieth century NYC aimed to prevent outbreaks of diseases among school children, to detect and correct health problems, and to promote a healthy lifestyle. The NYC Health Department became involved in school health when it was still trying to establish itself. Following their 1860s reaction to infectious outbreaks, the Health Department and several public advocates began to call for a more complete vaccination program and the correction of deplorable school conditions. By the end of the century, these changes, for the most part had all been implemented.

Following these foundational advances, the Department of Health moved on to a more comprehensive school health program, and the dream of seeing health care workers in every school became a reality. This program, which began at the end of the nineteenth century, blossomed under the direction of Dr. Sara Josephine Baker and the Bureau of Child Hygiene. School health inspectors and school nurses worked with teachers and principals to enforce a detailed program involving health inspections, treatment for minor afflictions, as well as follow-up visits and educational programs for families and child hygiene. Health education was also taught in classrooms, where teachers and nurses were expected to pass on important advice to children. While the school health program

⁷⁶ *Ibid.*, p. 281.

⁷⁷ *Ibid.*, p. 360.

⁷⁸ *Ibid.*, p. 329.

was effective at reducing the number of children who were too ill to attend class, it was also subject to social and political influences, and at times became an unwieldy and ineffective bureaucracy. External criticisms, combined with uninspired public health leadership, led to the stagnation of the program in the 1920s.

To sum up, the development and evolution of the school health program provides a basis for understanding school health in the later twentieth century and into the present era. Schools, today, often face acute disease outbreaks, while they also play a critical role in health education. By studying the origins of school health, and the challenges, successes and failures of early programs, valuable lessons about contemporary school health programs can be learned and this may pave the way for establishing better school health programs in the future.