

BAKWIN LIBRARY
American Academy of Pediatrics
141 Northwest Point Road
P.O. Box 927
Elk Grove Village, IL 60009

Women in Health Care and Pediatrics: Historical Perspectives

Taken from Chapter II, of the 1982
*Report of the Task Force on Opportunities
for Women in Pediatrics.**



Edith Banfield Jackson

Task Force on Opportunities for Women in Pediatrics

Beverly C. Morgan, M.D., *Chair*; Professor and Chair,
Department of Pediatrics, University of California Irvine
Medical Center

Elizabeth R. Aplin, M.D., Practitioner, Columbus, Ohio

Linda Garrison, M.D., Practitioner, Kalamazoo, Michigan

Bettina C. Hilman, M.D., Professor of Pediatrics, Louisiana
State University School of Medicine

Doris A. Howell, M.D., Professor and Chair, Department
of Community Medicine, University of California, San
Diego

Ana Navarro, M.D., Program Coordinator, School of Public
Health, Medical Science Campus, San Juan, Puerto
Rico

Donna O'Hare, M.D., Project Director, Maternal Infant
and Family Project of the Medical Health Research
Association of New York City

Alexandra W. Pittelli, M.D., Practitioner, Harvard, Massa-
chusetts

Viviana Skansi, M.D., Practitioner, Virginia Beach, Virginia

Natalia M. Tanner, M.D., Practitioner, Detroit, Michigan

Liaison: Jane S. Lin-Fu, M.D., Representative from the
Office for Maternal and Child Health, Bureau of Com-
munity Health Services, HSA Department of Health
and Human Services

Staff: Jean D. Lockhart, M.D., Director, Department of
Health Care and Pediatric Practice, American Academy
of Pediatrics

Women in Health Care and Pediatrics: Historical Perspectives

Women have traditionally acted as health care providers, particularly in childbirth and child health care. However, careers in health care have not always been available to women; the legitimacy of health care provided by women has repeatedly been challenged. This chapter briefly traces the history of women in health care, the effects of changes in medicine and medical education on women's practice and the growth of pediatrics as a medical specialty receptive to women. Finally, accomplishments of some of the American women physicians and pediatricians are recognized.

In ancient times, concepts of health and medicine were primarily nurturant and caring like the role of women in society. Women practiced as midwives in ancient Greece and may have studied medicine with male students. In fourth century Rome, many female converts to Christianity became "medicae" and reportedly founded the first Roman hospital.

Women provided medical care during the middle ages but sometimes were hindered from full practice. Italian women were admitted to medical school and granted licenses to practice although their position in society often prevented them from using their knowledge. In Salerno, Italy a woman, Trolula, reportedly headed a University medical department staffed entirely by women and wrote

De Passionibus Mulieris which was a teaching text for several centuries. Women were medical practitioners as early as the thirteenth century in France and the Slavic countries. French female physicians may have accompanied the Crusades. However, by the fourteenth century, women were accused of practicing medicine illegally and many were excommunicated from the Church.

During the Renaissance, medicine began to change in ways which limited women's medical practice. Having been primarily a caring art, medicine became more technical as scientific advances were incorporated in medical teaching and the number of universities increased. Women were barred from receiving non-essential academic qualifications for medical practice, since they could not enter universities. Women continued to practice midwifery, nevertheless. In Russia, midwifery flourished with strong church and educational support.

Midwifery faced two setbacks in the 19th century. First, Queen Victoria broke with custom by having male practitioners attend her during childbirth because she wanted chloroform to ease the pain. Female midwives spurned the use of chloroform, while male practitioners were trained in its use.

Second, the induction of forceps in childbirth, which only men were trained to use, gave rise to the medical specialty of obstetrics.¹ These events changed the concept and conduct of childbirth in many countries for some time.²

In the United States, lay health care persisted during



Hattie Alexander

the 18th and 19th centuries in part due to the scarcity of U.S. universities. Women were often the source of medical care for sick children and during labor and delivery in the American frontier and rural areas and medical information was passed from mother to daughter. Women on southern plantations provided medical care for the household and the slaves.

By the mid-nineteenth century the American lifestyle was changing. Industrialization and urbanization brought women into the labor force outside their homes, particularly as teachers, domestics, and factory workers. In addition, more universities were established in the United States. Until this time, health care had been provided by a variety of healers including allopaths, homeopaths, and midwives.



Dorothy Hansine Andersen

Concurrent with the struggle to establish a single, preeminent medical profession there was an effort to exclude women from providing medical care.³ The emerging medical profession worked to exclude women from university training, and also tried to outlaw midwifery. However, women were encouraged to become nurses and trained nursing developed as a new health occupation. The organization of health care changed greatly. Medicine continued to evolve from a nurturant art to one emphasizing technology and science and encompassing two distinct aspects: one technical and more male, the other nurturing and more female.

A few women achieved a medical education. **Elizabeth**

Blackwell (1821-1910) is recognized as the first woman to graduate from a U.S. medical school, at the age of 28. She applied to two medical schools in Philadelphia, and was rejected by both. She then studied with two eminent Philadelphia physicians. One was so impressed with her ability that he asked his friend, the Dean of Geneva (N.Y.) Medical College to admit Elizabeth Blackwell and permit her to graduate. The faculty unanimously opposed



Martha May Eliot

this, but did not want to affront an eminent Philadelphia physician. Therefore, they left the decision to the class, who voted to admit Elizabeth Blackwell as a joke. After graduating first in her class, Elizabeth worked in children's hospitals in London and Scotland and at La Maternité in Paris.⁴

Dr. Blackwell became a role model for British women who wished to become physicians but were denied admission to medical schools in England and Scotland. The efforts of women such as Elizabeth Garrett Anderson and Sophia Jex-Blake led to the establishment of the London School of Medicine for Women and the Royal Free Hospital of London.

Elizabeth Blackwell returned to New York City to open a dispensary for poor women and children. After she was denied practice privileges in all the city's hospitals, Elizabeth Blackwell, her sister Emily who was a physician, and Dr. Marie Zakrzewski established a dispensary for women and children in lower New York City which became the

New York Infirmary for Women and Children. They later established a medical school for women at the same location.^{5,6} Women physicians established several medical schools for women in areas where women had been denied admission to existing medical schools. They also opened dispensaries or hospitals for women and children staffed by women physicians at the college site, so the medical students could gain clinical experience.

The late 1800's marked the rise of interest in child health. The first childrens hospital in the United States opened its doors in 1855. Dr. Abraham Jacobi was appointed as the first clinical professor of Diseases of Infants and Children at Columbia University in 1870. The *Archives of Pediatrics* was first published in 1884 and the American Pediatric Society was formed in 1888.⁷ At first, pediatrics was not readily accepted as a medical specialty. Children were viewed as miniature adults with similar medical problems. Pediatrics also seemed to lack the technical focus of the surgical specialties.⁸



Katherine Bain

By the turn of the century, diverse pressures created a demand for a pediatric specialty. The maternal and child welfare movement aroused concern about maternal and infant mortality. Childhood became defined as a unique period of life. Finally, the development of professional and licensing associations gave credibility and a focus to the pediatric specialty. The American Academy of Pediatrics was established in 1930 after controversy

over the Sheppard-Towner program for maternal and child health; the American Board of Pediatrics began certifying pediatricians in 1933.

Some traditional medical schools began admitting women in the early 1900's; women constituted up to 10 percent of their admissions. As a result, the women's medical colleges began to close or combine with nearby medical schools. Furthermore, many schools which had admitted women closed after the Flexner Report was published.⁹ The last women's medical school was The Women's Medical College of Pennsylvania which became coeducational in 1969. Many hospitals for women still exist, although they now have both male and female staff and patients.¹⁰

Women physicians who had succeeded in graduating from medical school frequently treated women and children, and were thus strategically in place to enter the newly emerging specialty of pediatrics. Moreover, women were historically well accepted in the area of child health care. Women previously had been denied access to the more technical aspects of health care. Perhaps the very lack of technical focus that slowed pediatrics' emergence as a specialty facilitated assimilation of women into the field.

It would have been natural for women in pediatrics to develop interests reflecting the social concerns of the maternal and child health movement, such as prematurity, public health, and infant mortality. Although



Katherine Dodd

this happened, the prominent early woman pediatricians were also highly skilled in the basic sciences. **Hattie Alexander** (1901-1968) as an intern developed a life-long interest in *Hemophilus influenzae* meningitis. In addition to attaining full professorship, she directed the microbiological laboratory at the Babies' Hospital in New York City, which became a model for high standards of performance. Working with scientists at the Rockefeller Institute, she used her knowledge of genetics to produce a serum for bacterial meningitis which was more effective than the horse serum then available. She became world-known as an expert in the early recognition and treatment of bacterial meningitis.

Dorothy Hansine Andersen (1901-1963) worked as an assistant pathologist after being denied a residency in surgery and an appointment in pathology because she was a woman. She found a lesion of the pancreas at autopsy on a child who had been diagnosed as having coeliac disease. Further study of similar children led her to the identifica-



Virginia Apgar

tion of a previously unrecognized disease which she called cystic fibrosis. She continued to refine the diagnosis and management of cystic fibrosis. Her discovery of increased salinity in the sweat of cystic fibrosis patients led to the development of a simple diagnostic test for the disease. She also outlined treatment for the respiratory tract infections which accompany cystic fibrosis. Her pathology interests led to the collection of infants' hearts

with congenital defects which were used to train pioneer heart surgeons for open-heart surgery. She also developed teaching seminars for heart surgeons.

Another pioneer in the field of congenital heart disease, **Helen Taussig** (1898-) directed the Cardiac Clinic at Harriet Lane Home/Johns Hopkins University. She made functional and anatomic diagnoses using three-lead electrocardiograms, cardiac fluoroscopy and roentgenograms and developed the Blalock-Taussig anastomosis with Dr. Alfred Blalock. Dr. Taussig also helped prevent an epidemic of birth defects in the United States when she examined deformed children in Germany whose mothers had taken thalidomide early in their pregnancy. Her findings were instrumental in convincing the Food and Drug Administration not to release thalidomide in the United States. Dr. Taussig has received the M.S. Medal of Freedom, in addition to many other honors.¹¹

Dorothy Reed Mendenhall (1874-1964) began her career as a bacteriologist and recognized Hodgkin's Disease as a disease associated with a distinctive cell which became known as the Reed Cell. Finding no opportunity to advance at Johns Hopkins, she became associated with the New York Infirmary for Women and Children and the Babies' Hospital. After she married, she moved to the University of Wisconsin. The death of her first-born child stimulated an interest in infant mortality. She gave lectures and classes on infant health and nutrition to the



Jessie Boyd Sriver



Margaret Morgan Lawrence

relationship between obstetricians and pediatricians. She recognized the need for a systemic study of factors affecting the survival of premature infants. Under the auspices of the Children's Bureau, her study of 1,000 newborns showed that prematurity was the most common cause of death among newborns. She later chaired the committee on neonatal studies of the American Pediatric Society. In 1935 her study of 105 hospitals showed that none had special facilities for premature babies. Therefore, she published standards for the hospital care of full term and premature newborns in collaboration with the Children's Bureau. The American Academy of Pediatrics published an expanded version of her standards in 1948, and subsequent editions of the manual, *Hospital Care of Newborn Infants*, have become one of the Academy's most widely distributed publications. Her book *Premature Infants, A Manual for Physicians* was also published in 1948. Dr. Dunham worked to extend infant care into the home and community by coordinating the efforts of pediatricians,

women of Wisconsin and encouraged several government agencies to open infant clinics. At the Children's Bureau, she emphasized the importance of height and weight checks, developed growth norms for children, and devised standards of child development to use in health centers.

Ethel Dunham (1883-1969) is known for improving the newborn nursery at the New Haven Dispensary and especially for improving the working

public health nurses and social workers. She was awarded the American Pediatric Society's highest honor, The Howland Medal, for her research on prematurity.

Martha May Eliot (1891-1978), F.A.A.P., known for work in the control of rickets, headed the U.S. Children's Bureau for many years and was "one of the most influential pediatricians to hold positions of public authority in the United States during a long and distinguished career."¹² For more than fifty years she championed the development of health services for mothers and children, in this country and with the World Health Organization.

Katherine Bain (1897-), F.A.A.P., a pediatrician from Washington University, held numerous positions at the U.S. Children's Bureau from 1940-1967, including Deputy Chief for six years. She made the first nationwide survey of infant feeding practices in American hospital nurseries.¹³ She was highly instrumental in enabling the Children's Bureau to work toward its objectives and to work closely with the American Academy of Pediatrics.

Edith Lincoln (1891-1977), a pediatrician teaching and practicing in the hospitals and public clinics in New York City, became concerned about the prevalence of tuberculosis and its constant threat to children. She exerted pressure on city officials to clean up unsanitary living conditions, taught in the medical schools, lectured the public, examined, tested and treated children in clinics, established the TBC Preventorium for exposed children, and worked with the Public Health Service to lessen the incidence of tuberculosis. Her 1936 book, *Tuberculosis in Children*, co-authored with F. M. Sewell, became a classic text on tuberculosis.

Katherine Dodd (1892-1965) was the first woman to chair a Department of Pediatrics in a U.S. medical school other than at the Women's Medical College of Pennsylvania. After a short period in practice, she became a Professor in Pediatrics at Vanderbilt University, 1925-1943, then a Professor in Pediatrics at Cincinnati University, and then was Professor and Chairman of Pediatrics at the University of Arkansas Medical Center from 1952 until 1957. She then became a Distinguished Professor of Ped-

iatrics at the University of Louisville (Kentucky) School of Medicine. After three years she was appointed Professor of Pediatrics at Emory University School of Medicine. "Katie" Dodd wrote over 50 papers and several sections of Nelson's Textbook of Pediatrics and is still remembered as an exceptional teacher.

Edith Banfield Jackson (1895-1977) was a pediatrician and psychiatrist who advocated natural childbirth and breast feeding. She directed the rooming-in project at Grace New Haven Community Hospital (later Yale University Hospital) 1946-1953. From 1949-1959 she was Clinical Professor of Pediatrics and Psychiatry at Yale University. She influenced others, such as Lula C. Lubchenco, to become leaders in the area of newborn care.

Virginia Apgar (1909-1974), Honorary F.A.A.P., began a surgical residency but turned to the developing field of anesthesiology. She became the director of anesthesia at Columbia Presbyterian Hospital, and became both the first woman to head a department and the first woman to hold a full professorship at Columbia University College of Physicians and Surgeons. She gave up administrative duties, however, to study anesthesia in childbirth. She developed the APGAR scoring system which rapidly became the standard means of evaluating infants' health immediately after birth. Virginia Apgar's career grew through her commitment to maternal and child health. She received a master's degree in public health, accepted an executive position with the March of Dimes and promoted the need for research on the prevention and treatment of birth defects.

Jessie Boyd Scriver (1894-), F.A.A.P., a distinguished pediatric teacher at the Royal Victoria Hospital and The Children's Memorial Hospital in Montreal, was elected President of the Canadian Paediatric Society in 1952 and has since received numerous honors including the Ross Award in 1982. Because of her special interest in prematurity, she influenced some of today's outstanding Canadian neonatologists.

Margaret Morgan Lawrence (1914-) is a pediatrician, child psychiatrist, psychoanalyst and author, who

headed the Child Development Center, Rockland County Community Health Center, and is presently Associate Clinical Professor of Psychiatry, College of Physicians and Surgeons, Columbia University, and Supervising Child Psychiatrist, Harlem Hospital Center, N.Y., N.Y. She was the first black female pediatrician certified by the American Board of Pediatrics.

Leona Baumgartner (1902-), F.A.A.P., pediatrician and public health worker, held a number of preventive health teaching and administrative positions in county health departments, in the Children's Bureau, the World Health Organization, medical schools, and public health programs. Her numerous articles on preventive health have appeared in journals, newspapers and women's magazines. She also removed many health hazards in New York City when she was Commissioner of Health from 1954-1962, and served as President of the American Public Health Association, 1958-1959.

The outstanding accomplishments of pioneer women in pediatrics forecast the impact others were to achieve as their contemporaries and successors. Many other women have made important contributions to pediatrics and have received national and international recognition. The list is growing rapidly and could be extended to include women in academia, public health, research and pediatric practice today. They cannot all be acknowledged here but their devotion to children and to medicine has earned them the respect of their communities and their nation.

Some of the difficulties women pediatricians faced earlier have disappeared, but many challenges still remain. It is helpful to study the obstacles women physicians encountered in the past and their perseverance pursuing their goals and making important contributions to medicine and pediatrics.

References

1. Donegan, J. B.: Midwifery in America, 1760-1860: A Study in Medicine and Mortality. Unpublished Dissertation, Syracuse University, 1972.
2. Editorial, Who Was the First Woman Physician? *JAMA* 1974, 230:23-30.
3. Ehrenreich, B.: The Health Care Industry: A Theory of Industrial Medicine. *Social Policy* 1975; Nov/Dec:5-11.
4. Wilson, D. C.: *Lone Woman*. Boston, Little Brown & Company, 1970.
5. Ross, I.: *Child of Destiny—The Life Story of the First Woman Doctor*. New York, Harper and Brothers, 1949.
6. Thorne, M.: The Romance of Medical Education of Women in England. *Medical Women's Journal* 1925; August:32.
7. Fahen, H. K., McIntosh, R.: *History of the American Pediatric Society 1887-1965*. New York, McGraw Hill Book Company, 1966.
8. Stevens, R.: *American Medicine and the Public Interest*. New Haven, Yale University Press, 1971:219-222.
9. Jacobsen, B., Jacobsen, W.: Only 8%! A Look at Women in Medicine. *Civil Rights Digest* Summer 1975; 7:20-27.
10. Harny, A. McG.: *Adventures in Medical Research: A Century of Discovery at Johns Hopkins*. Baltimore, The Johns Hopkins University Press, 1976.
11. Engle, M. A.: Biographies of Great American Pediatricians: Helen Brooke Taussig, The Mother of Pediatric Cardiology. *Ped Annals* July, 1982; 32:629-631.
12. Schmidt, W. M.: Some Kind of a Social Doctor; Martha May Eliot. *Pediatrics* 1979; 63:146-149.
13. Cone, T. E.: *History of American Pediatrics*. Boston, Little Brown & Company, 1979.

Photos of Drs. Eliot and Jackson, courtesy of the Schlesinger Library Radcliffe College.