
25.6 The women physician anaesthetists of San Francisco,
1897–1940. The legacy of Dr Mary E. Botsford (1865–1939)

SELMA HARRISON CALMES
Kern Medical Center, Bakersfield, California, USA

A unique situation existed in the world of anaesthesia in San Francisco between 1897 and 1940; the specialty was dominated by women physicians. This paper documents the large number of women who were professional physician anesthetists (the term used at that time in the United States rather than 'anesthesiologist') in San Francisco during this period and examines the reasons why this situation probably evolved.

Work on another historical project several years ago resulted in the discovery that there were a surprising number of women anesthesiologists, women who were publishing scientific papers and who were even presidents of the national and state specialty societies. This discovery led to a new project to determine the number and percentage of women physicians in anesthesia as it evolved as a specialty.

A study of the population of anesthesiologists in the USA 1920-1948

This was a population study based on the directories of the United States' specialty societies between 1920 (the date of the first directory of anesthesiologists publication) and 1948 (that of the first directory published after World War II) (1,2). The study revealed that women doctors were found in anesthesia practice about twice as often as were male physicians and twice as often as might be expected based on their representation in the physician population. Briefly, this was because there was a feminine tradition in anesthesia in the United States due to the heritage of nurse anesthetists and, consequently, women physician anesthetists were accepted

Table 1
California members of the American Association of Anesthetists in 1920

Botsford, Mary	Oldenbourg, Louise
Burrows, Robert	Palmer, Caroline
Kavanagh, Mary Francis	Rithwilm, Lorruli
Martin, Jean	Talman, George
Mosgrove, Anna	Veach, H. C.
Murphy, Mary	

Table 2
Rank order of states by number of anesthetists, by year

	Total MD anesthetists	Women MD anesthetists
1920	New York (41) Ohio (18) California (17) Massachusetts (14) Illinois (14)	California (11) Illinois (4) New York (4) Texas (2) Indiana (2)
1930	New York (303) Ohio (192) California (161) Pennsylvania (101) Illinois (93)	California (48) New York (14) Illinois (11) Ohio (8) Massachusetts (7)
1940	New York (357) Ohio (216) California (161) New Jersey (96) Pennsylvania (94)	California (55) Illinois (27) New York (26) Massachusetts (15) Ohio (12)
1948	New York (505) California (219) Ohio (214) Massachusetts (157) Pennsylvania (133)	California (54) New York (42) Illinois (23) Massachusetts (19) Ohio (14)

Table 3
Professional MD anesthetists, total and female, by year

	San Francisco	Los Angeles	New York City	Boston
1920	8(11)	3(6)	1(4)	1(1)
1930	27(42)	12(83)	1(14)	4(7)
1940	26(39)	12(74)	12(26)	4(15)
1948	18(40)	7(58)	29(420)	8(40)

() = Total number physician anesthetists

by the surgeons, who no doubt hoped that women doctors would combine the submissiveness of nurse anesthetists with the medical training that many now realized was necessary for safe anesthesia practice. Anesthesia was also poorly paid at that time, and thus was unattractive to many men, and women doctors had fewer practice options than did men.

While working on this population study, it was noted that there were a large number of women physician anesthetists in California. An example is the list of names of the Northern California members of the American Association of Anesthetists (AAA, the first national anesthesia society in the United States) in 1920 (Table 1).

The next step was to arrange the States in rank order by the largest total number of members and by female members, by year, (Table 2). Although New York always had the greatest number of members, California always had the most female members. The number of female members in four major cities were then tabulated (Table 3). The largest number of women in anesthesia practice in San Francisco is striking.

Why had this fascinating situation happened? California always had many more women medical graduates than other states after 1876, when the first woman graduated from a state medical school (3), but, for many years, there was only one hospital to which women physicians could go to to receive the increasingly important hospital training. This was the Children's Hospital of San Francisco, founded in 1875 by three women physicians (4). The Children's Hospital of San Francisco was one of nine hospitals formed by women doctors in 19th century America to provide training that was not often available to women physicians at other medical institutions. The other women's hospitals, and 17 women's medical colleges, were located in the East and Mid-West (5), so there were many more opportunities for medical women in those areas.

Dr Mary E. Botsford

As California's women medical graduates were 'funnelled' through the Children's Hospital because they had no other place to go, they saw Dr Mary Botsford (1865-1939) at work. Dr Botsford was probably the first woman physician anesthetist in America, and she was almost certainly the first Californian who specialized in anesthesia*. An 1896 graduate of the Medical Department of the University of California (now the University of California at San Francisco, UCSF), she decided in 1897 to devote her practice to anesthesia after seeing how sick patients became after anesthesia and surgery. For the first two years, she did not earn any income from her anesthesia practice and supported herself by doing general medicine in the afternoons (6).

A charismatic, energetic leader, she trained at least 46 women in this specialty and then sent them out to hospitals in surrounding areas and other parts of California. Some of these were the women who were on the list of Northern California AAA members in 1920 as a cross check with the State of California Medical Directory volumes for the period shown. They were all graduates of California medical schools who interned at the Children's Hospital and trained with Dr Botsford. The women were very loyal to her, and she literally controlled anesthesia in the state for nearly 20 years. This was much resented by the men. Because of the many women she trained, the major Bay Area hospitals did not have nurse anesthesia, in contrast to most other hospitals in the United States, until after the Botsford generation of trainees was gone.

*This statement is made after extensive reading in the California medical journal and early anesthetic journals.

She did a considerable amount of scientific research, some of it with Arthur Guedel and Chauncey Leake, and she wrote many scientific papers, a number of which are of special interest (7-9). She also had a number of medicopolitical 'firsts'. She led the effort to get a section on anesthesia in the State medical association and was the first president of that group (10). The present state society of anesthesia evolved from that organization, so she can be said to have been its first president. She was responsible for the passage of a state law, the first in the United States, requiring that anesthesia be taught in medical schools. She was also the first faculty member in anesthesia at UCSF, and she was the first full professor of anesthesia at that institution. She was the third female president of the Associated Anesthetists of the United States and Canada in 1930 (11,12,13).

Botsford's legacy is gone now; the percentage of women members in the present American Society of Anesthesiologists, is the same in San Francisco as nationally. The women physicians who provided anesthesia in the San Francisco area in the period 1897 to 1940 were all of the same generation. They died out when the 'funneling' of all women medical graduates through a single hospital ended during World War II, when hospitals started taking women physicians for hospital training positions because they were unable to get men, and, when subsequently, more men began to enter anesthesia after World War II as the specialty became more technical and better paid.

What we can learn from this unique situation in San Francisco during that time is that, given the opportunity (for example, the manpower needs of a developing specialty, the chance to organize as the result of the 'funneling' of all women medical graduates through a single institution, and a charismatic leader like Mary Botsford, women physicians became leaders at a time when their total numbers were very small. Analysis of this situation also in San Francisco makes it clear how women physicians were constrained in other specialties and in other geographic areas.

References

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*This analysis was presented at the annual meeting of the American Association for the History of Medicine in San Francisco 6 May, 1984. The paper is available from the author.