that controlled trials have bestowed in fingering ineffective treatments and in sanctioning truly effective long-term treatments and preventive strategies, nor dwells on the shortcomings of clinical trials that this reader hoped would be more fully exposed: the lust for large numbers to crown small effect sizes with "significance"; the piebald heterogeneity of multicentre trials; the overuse, in almost every report, of statistical analysis; the false attribution of causality; and the careless notion that there is such a "thing" as randomness.

The American Medical Association's decision in 1847 was vigorously opposed by some influential medical teachers on two grounds: first, that the substitution of "physiological therapeutics" for the physician's exercise of judgement would diminish the physician's role as a healing presence and reduce his opportunity to individualize treatment; second, that a gap between the basic sciences and the daily practice of medicine would widen into a chasm that would be impossible for an individual — or an idea — to bridge. Clinical research would be foreshortened or abandoned; the laboratory would be the only source of new knowledge. These ancient cavils still resonate today, as clinical research and laboratory science proliferate.[3]

Concerns about the co-opting of the physician's judgement and the imposition of a new, alien discipline may apply with equal or greater force to medical statistics. The results of a clinical trial position the patient as a point in a probability distribution constructed by inductive logic. The resulting rules of evidence-based medicine constrict the physician's options for individualizing treatment, whereas the physician of 1910 could at least open Osler's textbook to deduce what would be best for his patient. It seems to me that the gap in training and mentality between the physician and the statistician is far greater than that between Claude Bernard, pioneer of physiology, and the practising physician of his day.

The Lady Tasting Tea is highly recommended as "cultural" reading for anyone involved in clinical trials. Salsburg has given faces and voices to some of the people who created medical statistics, and in so doing reminds us that there is much in their theories that we may not be applying wisely, or do not understand.

Peter Morgan
Lanark, Ont.

Dr. Morgan is a former scientific editor of *CMAJ*.

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Past progressive

Lying in

When my grandmother, Anne Dawson Webb, passed away in September 2000 at the age of 90 my parents dispersed her belongings to family members and the Salvation Army. Among the teacups and knick-knacks destined for the latter was an old book that caught my eye: *The Bride's Book — A Perpetual Guide for the Montreal Bride*, published in 1932. I felt compelled to rescue it.

Thumbing through the table of contents, I mulled over the chapter titles. Some topics were expected: "Cook Book of Tested Recipes," "The Art of Entertaining" and "Health and Beauty Hints." More intriguing were "Mystic Art of Tea Cup Reading" and "Poisons and their Antidotes." (Was the emphasis on poisoning, or on antidotes, I wondered.) Then I saw the chapter I knew I would read first: "What an Expectant Mother Should Know." As a doula practising 70 years after *The Bride's Book* was written, I wondered what women of my grandmother's day would have been told about childbirth. And, as I began to read, I felt as if I were witnessing my grandmother's own experience.

When she arrived at the maternity hospital, a woman in labour would have been "washed, and scrubbed, and shaved, and covered with linen which has been boiled and dried." She would have been given an enema. And chances are she would receive some kind of anesthetic:

> Pain-deadening agents are numerous, harmless, inexpensive and successful; and it is only a matter of experience to find a way of reducing the suffering to an easily bearable if not negligible degree. It may be the "laughing gas" or so-called "twilight sleep", it may be chloroform, ether, or ethylene; but some one of them, or some combination, will be found peculiarly appropriate to each case. It will be both safe and efficient. The necessity is extreme, and it is barbarous to deny a woman this relief.

True to the legacy of Semmelweis, the doctor was advised to wash his hands before examining the labouring women: "The general practitioner, who comes in contact with pus or any other contagious cases, will want to prolong the washing process to fifteen or twenty minutes." In his examination he "notes the location of the [baby's] head and back, finds and counts the heart-tones; and estimates the descent

of the head and the character of the pains. The capacity of the pelvis and the size of the child are duly measured, so that all parts of the problem are up for appreciation."

Advice for the second stage of labour was as follows: "If the room is prepared, and the clean linen ready to apply, the desire to bear down may be encouraged. An anaesthetic will often aid in relaxing the tissues and will prevent unnecessary suffering. The actual birth of a child need not be felt as a rule."

As soon as the child was born, the doctor would hold the infant up by the feet so that, "by gravitation, all mucus and fluids [would] run out of the mouth and windpipe." If the child did not breathe right away, the doctor would attempt to stimulate a cry with "a gentle slap upon the back, or [by] blowing upon the chest." The umbilical cord was tied in two places and then cut. The child was then "wrapped up in a soft warm blanket, and removed to a safe place." The mother was offered a glass of warm milk "as soon as she could swallow" (How much anesthetic would she have had?) and was then encouraged to sleep for as long as she could.

She remained in hospital for the "lying-in" period, which could range from 2 weeks to 2 months. A binder was placed around her waist "just snug enough to give her a sense of support" and napkins pinned to it to collect the postpartum discharge. Twelve hours after delivery, the woman's breasts were readied for lactation by "cleansing with castile soap and warm water and then rinsing with a fifty per cent alcohol solution. The nipple is further cleansed with an applicator saturated with a fresh boric acid solution." Sturdy infants were allowed one breast at each feeding and only for fifteen minutes. Prolonged nursing, it was believed, did not give the baby more food but only an intake of air, leading to colic. "Until the third day, when the milk comes in, the child should be fed every three hours with sterile water in which milk sugar has been dissolved." After the third day, a baby that cried between feedings was thirsty (rather than hungry), or his mother's milk was not satisfying. Giving bottles of cool water was recommended before one accused the milk of being inferior.

Fred Sebastian

In spite of all these practices (which were more likely to sabotage breast-feeding than to support it), breast-feeding was endorsed as the best for baby. Women were encouraged to nurse their infants for the first year. Other attitudes were less supportive:

> Nowadays it is rare to find a mother who does not want to nurse her baby, but unfortunately the human race seems, to a certain extent, to be deteriorating in respect to the mother's nursing ability. Perhaps the refinement of civilization [has] given us better mothers but poorer nursers.

Rest was considered essential, and "for the first week most thoughtful and considerate friends will ... [stay] away from the sick room." It was expected that women in the postpartum period would have a nap every afternoon and at least six hours of sleep at night.

Women were expected to remain in bed after childbirth. " 'Getting Up' on the ninth day is the tradition," we are told, although it was "often a saving of time to stay in bed for twenty days rather than nine, lest the uterus become malpositioned, necessitating surgery." Of course, staying in bed for so long created other problems. Lying-in women often became constipated, and it was routine to give them a laxative on the morning of the second day. Castor oil, followed three to six hours later by a soapsuds enema, was the preferred remedy.

My grandmother gave birth to her first child in hospital. After the delivery, her bonnie, healthy son was "removed to a safe place" — the central nursery. And, as the wisdom of the day prescribed, she had a lengthy lying-in. During that time a deadly infection swept the nursery, killing more than 80% of the infants. Had her baby roomed with her, received only breast milk, been allowed to feed on demand and not been given bottles from the contaminated nursery, he might have lived. I remember Grandma telling us of how the nurses brought him to her, shortly before his death, dressed in a beautiful layette. She lamented that they must have known he was dying then and brought him to her dressed this way so she could see him one last time alive. The family Bible notes in small, faint script: "James Alfred Webb, born December 28, 1931 and died January 14, 1932."

Grandma had two other children: my uncle in 1934, and my mother in 1937. They were born at home with midwives attending. Grandma, it seems, had no faith left in the "safety of the hospital." Indeed, when I look at *The Bride's Book* more closely now it seems scarcely to have been used. Perhaps, after losing one baby to modern methods, she had no interest in learning more about childbirth "by the book."

Jan Nusche
Doula
Langley, BC

The Bride's Book was published in 1932 by The Brandow Publishing Company in Montreal. No author is named.