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DeBakey Sisters Teach Logic and Language of Medicine

By RONDA WENDLER Texas Medical Center News

If your doctor tells you you're suffering from cholelithiasis, do you know what that means? Probably not.

Guess what else you may not know? Your doctor is suffering from an affliction called logorrhea, or "excessive or stilted wordiness." Otherwise, he would say you have not cholelithiasis, but gallstones.

Selma and Lois DeBakey have spent their lives fighting logorrhea, which causes doctors to use five words when one will suffice. Fortunately, their efforts and those of other medical linguists have resulted in considerable improvement in the past few decades.

"Because the medical vocabulary is largely Latinate (derived from Latin)," Lois says, "doctors favor big words, but small ones sometimes get the point across better."

Examples? Doctors use "hemorrhaging" when excessive bleeding will do, "myopic" instead of nearsighted and "diaphoresis" instead of profuse sweating.



For more than 40 years, Selma, left, and Lois DeBakey have been helping doctors refine their written and verbal communications.

In the stilted world of "medicalese," or the word the DeBakeys coined for it – "medicant" – doctors don't give drugs, they "administer" them. They "demonstrate" instead of show, "endeavor" instead of try, and "utilize" instead of use.

"This is windy, heavy language that drags the listener through dense verbal underbrush," Lois says. "It inhibits communication."

The DeBakey sisters say gobbledygook has become an epidemic not only in medicine, but in other professions as well.

Lawyers speak "legalese," educators talk "educationese," and journalists' jargon is "journalese." No profession is immune, Lois says.

The culprit, she says, is "Engaging the tongue (or pen) before activating the mind."

For decades Selma and Lois, both professors of scientific communication at Baylor College of Medicine, have given seminars and symposiums around the world to help doctors become more articulate, precise, and clear.

"We teach the logic and language of medicine," explains Selma.

The sisters began curing doctors of terminal gibberish decades ago at the suggestion of their older bother, noted heart surgeon Michael E. DeBakey, M.D.

"Early in his career, our brother noticed that his colleagues, who were some of the brightest and most learned people in the country, had problems speaking and writing simple, clear English," recalls Selma. "He suggested that with our education and training, Lois and I could pursue a career helping physicians communicate better."

So they did.

Selma and Lois began holding two-day seminars at medical conventions around the world. In 1962 at Tulane Medical School, they introduced the first curriculum-approved communication courses ever offered in a medical school. After being recruited to the Texas Medical Center in 1968, they brought their course to Baylor, where their brother had been appointed president.

The DeBakey sisters were the first to carve out a niche teaching doctors to think, read, and write critically and to express themselves in lucid language. Today, they're distinguished as the gold standard in medical communications.

"To put it simply, Dr. Lois DeBakey has done more to bring literacy to medical writing than any other person in the country," said Robert Moser, M.D., a former editor of the *Journal of the American Medical Association*. "If you write well and are an honest person, she rewards you; but if not, she comes down on you like a ton of bricks."

KEEP THEM LAUGHING

When the sisters first set out to cure doctors of "medicant," they realized their prospective students – physicians who had invested a third of their lives in formal education, at considerable personal and financial sacrifice – might be offended by the suggestion they had not learned to speak and write English effectively.

"But when you hear phrases like, 'There were four deaths, only one of which lived two months,' you know help is needed," says Lois.

To teach doctors how to communicate more clearly, the sisters knew they needed an appealing entreé, as Lois calls it, to draw physicians into the course. So they came up with an unusual approach to get their point across – humor.

Sentence by sentence, Selma and Lois dissected published, scientific articles in class, and stripped them of their pretentious diction, arcane jargon, and sloppy construction.

"You'd think the last place to find humor is in drab medical publications," Lois says. "But if you plod through the long, unfamiliar words and the bloated, pompous phrases, you'll find some very funny sentences."

For example, one doctor stated, "The patient's pelvis was fractured by being thrown from an automobile." Another noted, "The patient was released with a hot, foreign body." Yet another "Asked the patient to go to bed."

"The danger is others will misinterpret what you're saying if you don't think before you talk ... or write," Selma says.

To illustrate the comical flaws and trite medical expressions found in medical journals, the sisters commissioned *Houston Post* artist Dick Putney to draw a series of cartoons.

In one cartoon three doctors perch, like birds on a telephone wire, atop a patient lying in a hospital bed. The caption reads, "We decided to sit on the patient for awhile," meaning the doctors took time deciding what the patient's course of treatment would be.

Another cartoon captioned "Keeping the patient under surveillance" shows a patient stretched out on a bed while a Sherlock Holmes lookalike peers in the window.

Yet another cartoon depicts doctors wearing safari hats, carrying picks and shovels, while hovering over a patient on an operating table. The caption reads: "The patient was explored."

"They'd never seen such a humorous approach," Selma says. "Classes were supposed to be solemn and dull."

Curious doctors hearing laughter echoing through the halls would sneak out of sessions in neighboring rooms to see what all the commotion was about

"They'd stand in the back, and soon they'd be laughing, too," Lois says.

Astute-minded physicians quickly saw the practicality of the instruction, and stayed to hear more.

Selma and Lois were careful never to identify the doctors who wrote the verbal foibles dissected in class.

"We can tell you, however," Lois says, "that many of our examples came from esteemed, peer-reviewed medical publications, like *JAMA* and the *New England Journal of Medicine*."

After attending one of the sisters' classes, Donald Lindberg, M.D., director of the National Library of Medicine, said, "All of us were greatly entertained, and also lived in mortal fear we'd fall into that trap – and into their collection."

Soon the sisters' reputation spread and their courses became wildly popular. At the annual meetings of the American College of Surgeons, the waiting lists to get into their classes were a year long ... or longer.

"Their courses were the most popular by far," said C. Rollins Hanlon, M.D., former president of the organization. He labeled the sisters "the renowned exemplars of clear, forceful writing."

Today, doctors consider the DeBakey sisters their allies, not their adversaries.

"I feel I have guardian angels looking over my shoulder," wrote William Winters Jr., M.D., Methodist DeBakey Heart Center journal editor, in a thank-you letter to Selma and Lois. "Your suggestions are right on the mark. You are priceless gems to this community."

BEYOND GRAMMAR

Besides teaching doctors to abandon medicant for plain English, Selma and Lois coach their physician pupils to think logically and critically, to organize presentations rationally, and to double-check all facts and references.

Franz Inglefinger, M.D., former editor of the *New England Journal of Medicine*, called the DeBakeys' dedication to ethics "deep and unshakeable."

Their nephew, Denis DeBakey, says, "The simple meaning of character is, by your nature, always choosing the ethical over the expedient. That is lost on so many CEOs today, but it describes my aunts Selma and Lois perfectly."

The sisters rail against passive writing, which Lois says "sends me into a state of slumber."

Example?

Passive: Transplantation of the kidney was accomplished by Dr. Jones.

Active: Dr. Jones transplanted the kidney.

"See the difference?" Lois asks. "Shorter and more direct. Nothing hinders communication as much as words when they are used excessively and imprecisely."

Proper grammar is essential, yet in medicine grammar should be considered after clarity of expression is achieved, the sisters say.

"'I ain't got no dough' is crystal clear. We know it means 'I don't have any money'," Selma says. "Its grammar is fractured and less than desirable, but at least we understand the meaning of the phrase."

Vague or ambiguous language is a far worse sin than poor grammar, Selma says.

"You can always polish the grammar later."

VERBAL MIMICS

Why do so many doctors use ambiguous language, and prefer long, complicated words over short, simple ones?

"We are all mimics in language, which is why regions have different accents and dialects," Lois says.

"Physicians read many numbingly boring journal articles, then emulate that style. Many busy doctors have little time to read anything other than medical articles."

Medicant, like other forms of jargon, is handy when you want to conceal lack of information and bolster pride, Selma adds.

"It's an attempt to camouflage a lack of substance," she explains. "If the message is readily understood, it may not seem as important."

Lois warns that medicant's verbal atrocities defeat the purpose of language, which is communication.

"When doctors abandon medicant for simple English, everyone benefits, especially patients," she says.

"Patients will understand and therefore follow their doctors' instructions; doctors from various specialties will better understand one another; voters will understand medical legislation they're being asked to vote on; and funding agencies can make informed decisions about where to invest their grant dollars."

STILL WORKING

Today, the DeBakey sisters head to work every day, dressed in tasteful business suits, stockings and pumps. Their shared office in the Texas Medical Center is one door away from the offices of Dr. Michael DeBakey, Texas Medical Center News – DeBakey Sisters 4 of 8 who says of his sisters, "Deep down, you really depend on your siblings for the kind of support that is very subtle, but, nonetheless is there. You share your thoughts with them, even though you might not be able to share them with others. You don't feel alone."

Catherine DeAngelis, M.D., editor of *JAMA*, says of the siblings, "Behind every great man, there's a great woman ... but Michael DeBakey has two."

In Selma and Lois' conference room, the cartoons that made their courses so popular fill a wall-to-wall, floor-to-ceiling bookcase. Other shelves hold neatly arranged journal articles, textbooks, and speeches the sisters have published, meticulously detailed scrapbooks filled with letters of appreciation from admirers, and program brochures and photos from past courses.

As they have throughout their careers, Lois and Selma rise long before dawn and go to bed only after they have completed their priority work for the day. In earlier times, they have been known to work through the night on urgent projects.

"We're workaholics. All the DeBakeys are," Selma says. "I can't remember a night that we didn't bring work home."

She and Lois jokingly refer to "after 5 p.m." as their "second shift."

"We're very fortunate to enjoy our work," Lois says. "There are so many people who dislike what they are doing and feel the need to escape. It's a joy learning, producing, and teaching. We don't have to escape our work because we find it stimulating and rewarding."

FAMILY VALUES

Their outlook is rooted in their childhood. The sisters were surrounded by a family that placed a high value on education.

Their parents took them on weekly trips to the library, so they always had plenty of books to read.

"In fact, we were surrounded by books," Lois says.

"Our beloved mother and father were the most unusual people we have ever known. Highly intelligent, civic-minded, industrious, and compassionate, they were happiest when helping others," Lois says. "They taught us early to know the joy of sharing, to give some of our clothes and toys to children who weren't as fortunate. They always gave anonymously – they never wanted or needed a concrete monument attesting to their philanthropy."

Their father was a highly successful and prosperous businessman who owned several pharmacies, built part of the main street in their home town, and held other investments. He had an intuitive knack for making things work. Selma recalls her father watching someone perform an extremely complex task one time, then repeating it perfectly himself.

"That's all it took – one time, then he had it," she says.

The DeBakey house is where others in the community came for advice.

"It was a magical way to grow up. Our parents were most unusual ... almost divine," Selma says. "The dean of Tulane Medical School called our mother a saint, and so did many others."

All the DeBakey children were encouraged to pursue higher education, and to remain in college as long as they liked. Michael, the eldest of six children, and brother Ernest attended Tulane University and became supersurgeons. Selma earned her bachelor's degree with honors from Tulane's Sophie Newcomb College. Lois earned her undergraduate degree in mathematics from Newcomb and her Ph.D. from Tulane in literature and linguistics.

Though Selma and Lois spent most of their joint careers in a male-dominated profession, they were never intimidated.

"We knew that hard work and standards of excellence would be rewarded," Lois says.

"After being recruited by Baylor, we traveled constantly, met thousands of interesting and inspiring people, and enjoyed ourselves immensely," Selma says. "It never felt like work to us."

The sisters continue to receive requests from editors and program coordinators eager to hear their views on such subjects as illiteracy, preparing effective papers for publication, ethics, or one of their pet peeves – Hollywood celebrities and professional athletes (which they deem an outrageous oxymoron) testifying before Congress on subjects they know little about and endorsing health and other products.

"What credibility do they have to persuade anyone to buy anything they endorse when pretense and children's games are at the core of what they do for a living?" Lois asks. "And why does an actor playing the part of a physician make millions a year while a real physician is considered greedy if he makes \$200,000 annually?"

"Maybe those who idolize the actor pretending to be a physician should call him when they have a medical emergency."

The sisters throughout the years have published articles defending physicians who feel they have been unfairly labeled by the press as greedy and noncaring.

"Society's priorities are askew in my opinion," Lois says.

Today, Selma and Lois, diminutive in stature, are giants in the field of medical communication.

But they don't think that way.

"Our parents taught us not to compete with others, but to compete with ourselves," Selma says. "To do better tomorrow than we did today."

Doctor, Are You Speaking in Tongues is a DVD featuring tips, delivered with humor, that help doctors steer clear of medicant. Narrated by Lois DeBakey, Ph.D., the DVD is available for viewing by physicians, medical students, and anyone else desiring to improve the clarity of their communication. To request a copy, e-mail ldebakey@bcm.tmc.edu.

rwendler@texasmedicalcenter.org

The DeBakey Sisters Use Cartoons to Poke Fun at Faulty Medical Writing

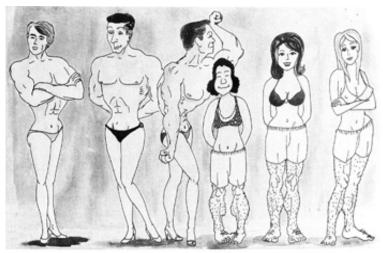


Fig. 1.—The group was composed of half men and half women. © Dr. Lois DeBakey.

The group was composed of half men and half women. (Copyright, Lois DeBakey)



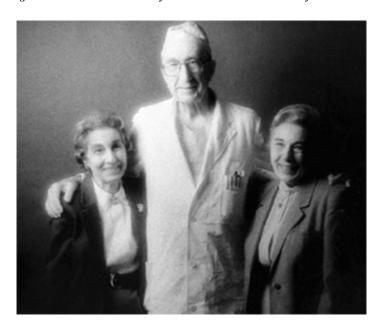
(Copyright, Lois DeBakey)



The patient had lost a kidney. (Copyright, Lois DeBakey)



FORMER FIRST LADY AND FRIENDS—Lois DeBakey, second from left, and Selma DeBakey, second from right, pose with another literacy advocate, former First Lady Barbara Bush, center, at a recent meeting of the Houston Women's Chamber of Commerce. Also attending the event were, from left: Iris Cox; Denis DeBakey, nephew of Selma and Lois; and Lavonne Cox, a founding member and health care chair of the Houston Women's Chamber of Commerce.



DEBAKEYS THREE—Selma DeBakey, left, and Lois DeBakey pose with their brother, heart surgeon Michael E. DeBakey, M.D.

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