

Herschel S. Horowitz: A Celebration of His Science and His Legacy

Stanley B. Heifetz, DDS, MPH

At memorial symposiums speakers generally tend to overdo it, magnifying the merits of the deceased. Let me say at the outset of my presentation that my words do not speak highly enough of the life and accomplishments of Herschel Horowitz.

It has been more than four months since Hersh's death, yet he remains a vivid presence in my thoughts and I am still having difficulty coping with his sudden loss. As many of you know, I worked with Hersh on a daily basis for more than two decades, which included travel to innumerable study sites in the United States and abroad. We would spend time together for weeks on end and got to know each other very well. He was my boss, mentor, colleague, and lasting friend. It is not often in government service that working relationships have such longevity, but Hersh was an extraordinarily talented researcher who made the job of conducting clinical trials of dental caries preventives exciting and professionally rewarding for me. Of course, it didn't hurt the recognition of a paper when published under the authorship of Horowitz and Heifetz. Besides, the precedent of duo authorship with a ring to it had already been established in the Public Health Service by Green and Vermilion. They say that success in most fields is due to theatrics and timing; our musical names provided the former. One story in this regard is the time renowned NIDR epidemiologist Al Russell, Hersh, and I checked in to a motel in Bartlett, Texas, the site of our defluoridation study. After Hersh and I signed the register, the desk clerk, who must have had an appreciation of classical music, seemed suspicious; but when Al signed his name as Jose Iturbi, the clerk became irate and ready to throw us out.

With respect to the importance of timing in Hersh's career, let me read a

few verses from a poem that has stayed with me from the days of high school English. It is by Edwin Arlington Robinson, titled "Miniver Cheevy."

Miniver Cheevy, child of scorn,
Grew lean while he assailed the
seasons
he wept that he was ever born
and he had reasons

Miniver loved the days of old
When swords were bright and
steeds were prancing
the vision of a warrior bold
would set him dancing

...
Miniver mourned the ripe renown
that made so many a name so
fragrant
He mourned Romance, now on
the town
and art, a vagrant

...
Miniver Cheevy born too late
Scratched his head and kept on
thinking
Miniver coughed and called it fate
and kept on drinking.

If Edwin Robinson had ever met Hersh, perhaps he would have written a contrasting sequel about a life lived that would "set one dancing." Fortunately, we have Hersh's own words about the timing of his life:

I was born at just the right time—
neither 20 years too soon nor 20
years too late—to take part as a
clinical trial investigator during
the halcyon days of studies de-
signed to measure the effective-
ness of various caries preventive
agents and procedures.

The quote comes from an article he wrote entitled, "The halcyon days of clinical field studies of dental caries prevention, 1960–1980." In those days the morbidity of dental caries was

staggering and Hersh, as he so often did, would describe the enormity of the problem in a way all could understand. He explained, "It was not unusual for me to examine high school seniors whose dentitions were beyond saving and whose parents planned to provide them with dentures as a high school graduation present." Quoting further from the same article,

You may think that my description does not sound much like halcyon days unless you realize that, because of my being at the right place at the right time, I had the opportunity to design, participate in or direct, analyze, and interpret the findings of a series of studies that assessed the effectiveness of various caries preventive methods designed for application by communities (community water fluoridation), by school systems (school water fluoridation), by dental professionals (various topical fluoride agents and pit and fissure sealants) and by individuals (fluoride toothpastes and self-applied regimens, such as dietary fluoride supplements and fluoride mouthrinses).

Hersh's place in the history of caries clinical trials was secure early on in his career. When Hersh received the John W. Knutson Distinguished Service Award in Dental Public Health (incidentally, he called this award and the H. Trendly Dean Award his treasures) the presenter noted, "These studies were of great importance, either because the research was particularly innovative or because he was the first to publish in a specific area."

One study I recall that was both the first and innovative was the study in Minneapolis where we compared the prevalence of dental caries in varying cohorts of children, all of whom had the same exposure postnatally from

birth to fluoridated water, but who had different trimesters of prenatal exposure. The findings showed no additional benefit from prenatal exposure when the child was exposed to postnatal exposure from birth. These results were instrumental in formulating FDA's restricted labeling of claims that the use of prenatal fluoride supplements by pregnant women benefit the teeth of their offspring. Hersh was not evasive in voicing his personal opinion about regulatory deficiencies in the protection of the public's dental health. He was to many an independent and reliable spokesman for the research community who told it like it was. For example, in a symposium on FDA and ADA evaluation of dental products, he criticized the FDA for requirements that "have not changed or even been modified to reflect the new scientific information." Further, he castigated the FDA on lack of participation in scientific colloquia on dental research matters and reproached the agency for having too few knowledgeable dental scientists.

Thankfully, in receiving numerous awards for his contributions in improving the dental health of the public, Hersh in his own words has told us much about himself. I have excerpted a few of his self-characterizations that help provide an insight into the type of person he was:

How I ever ended up being a dentist mystifies me. I should have paid attention to the fact that my piece of chalk that dental school applicants were required to carve to specifications broke in half. But not me; I had made the decision to go to dental school and there was no turning back.

So maybe Hersh was mechanically challenged, but his visual-tactile ability in validly and reliably diagnosing dental caries was second to none. Hersh was a superb field investigator.

His early assignments in the Public Health Service he described as uninspiring and he began to question his choice of dental public health. When he learned there was an opening for a field investigator, he recounts that he told his superiors "I was interested in research (whatever that was). From the first day it was obvious I had found my *métier*." *Métier*? I had to look that up. Hersh would always like to include a word in his papers that would

send the reader to the dictionary. I suspect his rationale was to improve the reader's vocabulary. Of his career in the PHS, he said

I was able to make a silk purse out of a sow's ear. Although I had chosen a basic profession for which I was ill suited, the traditional practice of dentistry that Alice claims would have killed me one way or another before now [written in 1995], I fortuitously found a niche within the profession—public health dentistry—which provided me a wonderful life in many ways. I spent the next 25 years earning a salary for work that I love.

Hersh readily bestowed his thanks and respect for all the people he worked for and with, irrespective of rank. His praise of Donald Galagan was particularly poignant. "I recognize Don primarily for his intellectual brilliance. I frequently found myself thinking, boy, is it wonderful working for that person." And Hersh's comments about me were, "It must have been difficult for Stan to work in an environment in which I, as his supervisor, stood most often in the limelight." Let me say it was not difficult at all. My recognition and appreciation of Hersh is comparable to, if not exceeds, the way he admired Don Galagan. I was privileged to have his companionship working by his side.

In reminiscing about Hersh, I'd like to tell you of some of the little things that I recall which made him larger than life to me. Whenever I would be talking to Hersh at international scientific meetings, so many of his foreign acquaintances would come by to say hello that we never could hold a complete conversation. And Hersh would always politely introduce each and every one to me, never failing to get the name right with exact pronunciation.

Hersh's criteria of a good hotel was a location downtown, period, no matter how spartan the furnishings or worn the towels. He loved to walk around visiting the town's historic sites and taking advantage of the local cultural activities. He was a great walker and never would ride when the destination was within walking distance.

Hersh loved cats and would never pass one by without sweet talking it and trying to befriend it. It was not just

cats. What does it say about a guy who sees a turtle in the middle of the road, pulls the car over, gives it a name and brings it home to wander safely around the grounds of Herkos Court?

In college, my Nobel Prize-winning professor thought it essential to teach freshman physics as well as be one of the lab instructors. Similarly, Hersh, despite his elevated status, never got away from participating in clinical studies, carrying out all the duties of a regular field investigator. Hersh was the consummate public servant imbued with the protestant ethic. He ran his program like a private business, promoting productivity and being concerned about waste and inefficiency.

In his retirement, Alice has told us the unwritten rule was that Hersh was in charge of fun and she was in charge of work. However, Hersh was as busy as ever as a consultant in dental research and public health (that's what his simple business card read) and it's no secret that consulting to him was often more fun than work. It was a good try, Alice, but we know that the rule was a distinction without much of a difference.

Years after we both retired from the PHS, Hersh would on occasion send me a copy of his manuscript for my comments. I had forgotten how refreshing it was to read his scientific writing. Its brevity, clarity, and precision stand out compared with most other papers that I am asked to review. Hersh's papers rarely contained complex statistical analyses of dental data such as log-linear analyses, or square root transformations. The less sophisticated the statistical test, the fewer assumptions, the better. In short, he never let the statistical analysis (the tail) govern or waive the clinical data (the dog).

A "Pepper and Salt" cartoon in the *Wall Street Journal* shows an answering service person saying, "He's awfully busy, his voice mailbox is full and his assistant is away. May I give you his rival." When the phone now rings at Herkos Court asking for THE dental consultant, Hersh will be no longer be there. Sure, the names of other dental public health consultants can be given; but the truth of the matter is, Herschel Symon Horowitz has no rivals and the likes of this extraordinarily talented, all-around human being will unlikely be found again. Public health den-

tistry, particularly the subspecialty of the testing of dental caries preventives in human clinical trials, has lost one of its best and brightest. The efforts of the entire dental profession in its continuing struggle to combat the scourge of dental decay are greatly diminished by his loss. However, his legacy will

live on through his prolific and productive research.

If I had to describe Hersh in one word, I would describe him as a "righteous" person; righteous in the sense of unerring in his research work and in general all life's activities; righteous in doing the right thing that he

was capable of and should do unwitnessed before all the world.

Over the years, Hersh and I have said goodbye to each other many, many times. But now, at this memorial symposium it's time to say the last goodbye to a dear friend ... Farewell, Hersh.