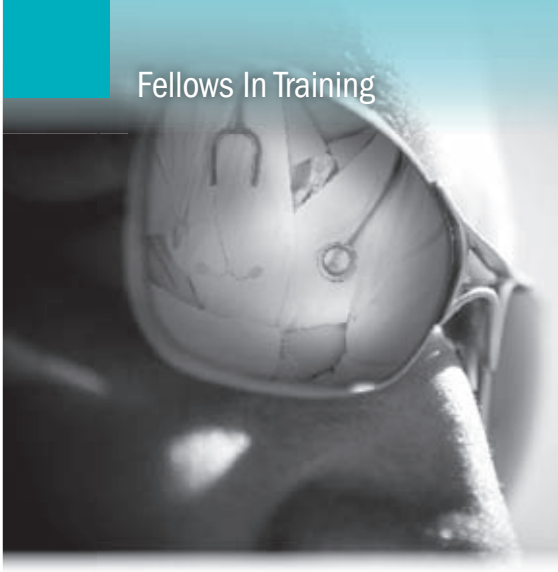

Reflections as the First Year Ends: What the Past Holds for the Future

By Rodney Samaan, M.D.

I believe it is important to reflect on the past in order to glimpse the future. My first year as a Cardiology fellow, which will draw to a close soon, has been an exciting and tiring one. It has been filled with information overload on clinical trials as well as learning points made by great mentors based on their clinical experiences.

However, I do have these reflections I would like to share.

Besides learning the clinical and technical aspects of the field, the overriding culture seems to be that cardiologists — and perhaps all physicians — practice medicine based on prior clinical experience in conjunction with evidence-based medicine. In many ways, I think this cannot be avoided in our field because of the time constraints on how new information is collected, distributed and debated. Internet access to medical information has become an invaluable tool not only for physician education, but also for patient care.

> **"practicing the way we currently practice just because 'that's the way it was taught to me' and 'in my experience' can no longer be endorsed"**

So I ask, is there a problem with practicing medicine this way?

Historically speaking, the mindset of physicians tends to be conservative and rigorous, which can have its benefits and risks. For example, consider Ignaz Semmelweis, M.D., in Vienna, Austria. In 1847, Semmelweis figured out that doctors who came from the autopsy lab to the delivery room were more likely to infect their patients with puerperal fever than the midwives who did deliveries only and who also happened to wash their hands in between patients. By instituting a simple hand washing system, he was able to reduce the incidence of puerperal fever among his patients by tenfold. Semmelweis was so adamant about his theory and upset with his colleagues for not listening that he eventually was fired from his job. Then his wife placed him in a psychiatric institution, and he died shortly thereafter. Some 20 years later, Louis Pasteur, M.D., proved Semmelweis to be correct.

My point is that practicing the way we currently practice just because "that's the way it was taught to me" and "in my experience" can no longer be endorsed. In fact, we face this issue in the catheterization laboratory at Saint Vincent Hospital, where we do the majority of our left heart catheterizations through the transradial approach. In my viewpoint, it is the better approach for patients, yet many cardiologists across the country continue to use the traditional femoral approach.

I believe that we also need to realize that clinical trials have their faults and inconsistencies, and we should not treat patients with new drugs based on one trial or on data interpretations provided by a pharmaceutical representative. We need to look at the whole picture and be patient for more data to validate or refute our initial analysis about a drug or procedure. Take the recent POISE, COURAGE, OAT and CHF-STAT studies. All of those studies raised questions about common practices.

I think we have to wonder who the next Semmelweis, particularly in cardiology, might be. We must be willing to be open to different interpretations of clinical medicine and practices, yet be humble and sophisticated enough to know when the truth is really the truth. We must remain confident that what we are doing is in the best interests of the patient.

Medical information and technology in medicine — and in particular, the knowledge base in cardiology — have advanced exponentially within the past few decades. Evidence-based medicine, coupled with clinical experience and the development of sound clinical judgment enhance the quality of patient care, which should be a priority in the fellowship training experience.

Samaan is a first year fellow in interventional cardiology at St. Vincent Catholic Medical Center, New York.