

Passage 1

My Stethoscope

As I dug through the drawers of a forgotten cabinet, I found my old slide rule. Forty-five years ago, this instrument had been critical to my daily life and dangled from my belt for at least 2 years. It saw steady, daily use, and with it, I was able to do complex calculations effortlessly. I immediately tried to use it, and to my chagrin, I found I could not. Even after searching online for operating instructions, I found it all but impossible.

Directly under this archeological stratum that had preserved the slide rule was my old, broken stethoscope—an original Leatham chest piece with the aluminum little bell broken off. As I reverently took the remnant of the instrument out of the drawer, I remembered the process that had led to choosing this stethoscope over all the others.

Auscultation of the heart was very important for medical students. We admired the residents and attending physician who could hear sounds that were simply not heard by us, and we rapidly learned which resident was really interested in auscultation by watching him position a patient when listening to the heart. We also quickly learned the hierarchy of auscultation: Medical students tended to use only the diaphragm; senior residents knew how to use the bell; and cardiology attending physicians listened in both the left lateral decubitus and leaning-forward positions.

At first we learned that murmurs we couldn't hear were categorized according to 4 grades of intensity by the experts, but a new 6-grade system attributed to Dr. Sam Levine became popular. The more secure residents joked about the grade 1 murmur, saying that only Dr. Levine and God could hear it—in that order. Endless arguments ensued on which make of stethoscope was the best. There were advocates for the Rieger–Bowles stethoscope. Others with equal fervor extolled the outstanding characteristics of the Sprague–Rappaport model, and the real experts claimed the superiority of the massive three-headed Tycos model. The newly popular Littman stethoscope wasn't even considered by any of us because none of the senior staff used it.

My problem was not merely failing to hear the murmurs but also in lacking to find an approach to cardiac auscultation. I spent hours reading about murmurs, and the eureka moment eventually came when I found Dr. Aubrey Leatham's article about cardiac murmurs in *Lancet*. Suddenly, it came to me—the reason I did not hear some of the murmurs was that I lacked the correct instrument. I learned about the Leatham chest piece (as the stethoscope was called) from one of my tutors, and he told me that I could order this exceptional instrument from Canada. I donated a unit of blood twice for \$25 each and took the bold step and ordered the stethoscope.

In a short while, it arrived and was instantly the subject of much discussion among my classmates. Very quickly I became a zealous promoter of the “chest piece,” and I particularly enjoyed showing off the “little bell” piece that worked well for children. We spent countless hours taking our patients to the “quiet room,” where the triple insulation allowed us maximum concentration for the cardiac sounds. Ever so slowly, I started to hear the murmurs others described, and I attributed this improvement to the wonderful new instrument in my pocket.

The stethoscope lasted through my housestaff training⁰ and as a young attending physician in general medicine. In the ICU, I demonstrated to the students and residents the proper way to listen to the various anticipated murmurs and extra heart sounds. Over the next 30 years (and two replacement Leatham chest pieces), I continued my habit of careful auscultation on rounds while my team stood at the bedside, shifting their weight from one foot to the other, urging me to stop expounding on all the sounds when they already had the echocardiography results in the chart.

During that time, I had to admit that the lengthy and careful auscultation seldom led to new findings. Rheumatic heart disease was pretty well gone from North America, and all of the congenital heart lesions had been fixed long before the patients became adults. There was still aortic stenosis and the description of the slow-rising pulse with an anacrotic notch, but by the time the patient arrived on the floor, there was already an echocardiogram telling us the gradient across the valve and the valve area. Many of my colleagues asked me why I jumped through all those auscultatory hoops when echocardiography was so much more accurate.

Eventually, I was forced to admit that I really had not added anything new through auscultating the hearts of our new admissions. Even third heart sounds failed to excite the students because the ejection fraction had been documented by an echocardiogram by the time we saw and evaluated patients with congestive heart failure. The last time I had made a significant cardiac diagnosis was some years ago when I saw an intubated and ventilated patient with hemoptysis in the ICU, and I recognized the straightening of the left heart border with the very large left atrium on the admission chest radiograph and diagnosed tight mitral stenosis.

Yet, I will not readily abandon the process of auscultation. I still listen to the lungs, even after I have seen the chest radiograph, and listen to the heart, even knowing the ejection fraction. Despite recognizing that my auscultation fails to add to the care of the patient, I persist. Touching the patient during the physical examination with my stethoscope helps to establish a connection with the patient, helps to gain their trust, and adds a bit to the often-impersonal greetings our patients receive. This impression, however, is not evidence-based.

Vocabulary

- chagrin *n.* 懊恼, 懊丧
bell *n.* 听诊器的钟面
hierarchy *n.* 等级制度, 层次
diaphragm *n.* 听诊器的膜面; 膈肌
decubitus *n.* 卧姿
murmur *n.* 心脏杂音
ensue *vi.* 接着发生
make *n.* 牌子, 类型
eureka *int.* 我知道了! 我找到了! 我想出了!
insulation *n.* 隔音
housestaff *n.* 住院医生
anacrotic *a.* 升线一波(脉)的
notch *n.* 切迹
gradient *n.* 阶差
auscultatory *a.* 听诊的
hoop *n.* 经受磨炼
intubate *vt.* 插管, 插入喉管
ventilate *vt.* 通风, 通气
hemoptysis *n.* 咯血
radiograph *n.* 射线照片, X光照片

Reading Comprehension

Directions: *There are four suggested answers to each of the following questions. Choose the best one according to the passage you have just read.*

- The author mentions the slide rule in the first paragraph to _____.
 - show how his mathematic capability has declined over time
 - introduce the Leatham stethoscope which was just as old
 - demonstrate how technology has evolved over time
 - recall his old happy times in medical practice
- It can be inferred that medical students admire the residents and attending physician because _____.
 - the latter were able to position the patient properly
 - the latter were in possession of the best stethoscope
 - the latter were on the top of the hierarchy of auscultation
 - the latter taught the former how to use both the diaphragm and the bell
- Which of the following is true about murmurs of heart?
 - Grade 1 is less intense than grade 2.
 - There are only 4 grades of intensity.
 - Littman categorized them into 6 grades.
 - The Rieger-Bowles stethoscope is the most sensitive in detecting them.

4. By reading Dr. Aubrey Leatham's article in Lancet, the author suddenly understood that he couldn't hear the murmurs because _____.
 - A. he was not bold enough
 - B. he didn't have the right tool
 - C. he was not intelligent enough
 - D. he was not adequately trained
5. The author mentioned echocardiography to _____.
 - A. justify that stethoscope has not been made obsolete
 - B. illustrate his insistence on the process of auscultation
 - C. remind his students of the potential problems of relying on hi-tech
 - D. argue for reconsidering stethoscope as an essential tool for diagnosis
6. The author insists on jumping through auscultatory loops because he believe that it _____.
 - A. remains one of the most important diagnostic tools for cardiac diseases
 - B. has become outdated because of the availability of new technology
 - C. serves the purpose of more than a mechanical physical examination
 - D. is still well appreciated by today's medical students and residents

Passage 2

The Changing Faces of Nursing: A Personal Story

The definition of nursing has been dramatically revised and shaped in the past 25 years, being influenced by nursing theorists, new diseases, and new technology. Mom started her nursing career at a different time, which seems archaic by some standards nowadays. Gloves were used primarily for sterile procedures and wound dressings. Syringes were glass (and reusable!), and nursing theory was only then being revised and utilized. Patients were at the hospital until they were almost well, and there was time for back massages at night. My mother still believes in this holistic type of nursing – she has been a home health nurse for over twenty years, specializing in wound care. She still believes in giving time to her patients. Her uniforms are still starched, and though the cap is gone, she has the excitement and optimism that she had when she graduated, balanced with more realism. Because of the work of others “behind the scenes” in nursing, she is able to continue to do what she believes in.

Nursing theorists’ ideas and research provided much of the scientific basis for nursing as we know it today. For instance, in the 1970s and 1980s, Martha Rogers wrote several works, all of which explaining that nursing is an essential discipline, separate from others – namely, medicine – and that it is a science, with a unique body of knowledge. Gone is the thought that we are physicians’ handmaidens or only change bedpans throughout the day. Treating nursing as a discipline in and of itself elevates the profession and enables us to research and provide care for patients from a perspective different than that of any other discipline. Currently, it is widely accepted that nursing is an independent profession, though debate is still common regarding that status. A similar discussion occurred in the 1980s, when the courts did not routinely define nursing as an autonomous profession and often used medical doctors as “experts” in nursing care.

My mother graduated in a time when computers were not really for the average person – she still has trouble turning on her PC—and were not generally used at the bedside. In fact, a study published in 1985 showed that a Medline search for articles took an average of 5-18 minutes by an experienced librarian. Now, I expect to find a Medline article in 5-18 seconds, depending on how fast I can type – no librarian required! Using the Medline search recently, I found journal articles from 1985 that reported the new drugs of the day. These included glyburide and glipizide, medications that no diabetic patient is without today, and other medications such as nicotine resin complex (also known as Nicorette, Merrell Dow) and labetalol that are still used routinely. I must confess a certain fondness for these articles – I used to read my mother’s nursing journals, and vividly remember the format of *Nursing* 83-88. Of course, at that age I was more interested in “ActionStat!” and similar columns that

were easier for a 16 year-old to read, as they were more exciting than information about medications.

Not only did my mother become a nurse after my parents' divorce, my father enrolled in nursing school after he remarried. When I started college a few years later, I listed my major as "nursing", mostly because I couldn't think of anything better than nursing. The only alternatives that I could see were business related: how exciting could insurance and number crunching really be? So nursing became my destiny.

Parker Palmer, the great modern-day educator, speaks of the power of our mentors and that a great mentor has the capacity to cause an awakening of truth within us; that he or she can give "full voice to the gift of thought". As a person who freely gives his heart to the people he loves, my father became my mentor by simply expressing his love for nursing – this nebulous, complicated world that I was only beginning to open my eyes to in the early 1990s. He received his nursing diploma in 1990, then immediately began pursuing a bachelor's degree at the same university I attended. We eventually graduated together in 1992, and I remember being fascinated before and after our graduation with his stories of nursing in a real hospital setting. Nursing was new to both of us and he told great stories of funny patients, nasty wounds, and physicians with delusions of grandeur. His hospital stories of patients and "real life" helped prepared me for the real thing – how to treat people, wash my hands properly, and handle sometimes difficult physicians. Our first few years of practice were during a transition period in nursing's history; this was the time when the potential power of computers and other technology was only beginning to be recognized, and legislation affecting health economics was initiated. Dad bought a computer in 1990, at a time when they were handy but considered by many to be just an easier way to write a paper. As I read literature from that time period, I realize that there is so much we take for granted, like computerized bedside charting, the internet, and easy access to information.

Little did we know at that time the effect that technology would have on our future practice. Could any nursing student even consider completing an assignment without internet access? Our textbooks are out of date before they are printed – we update portfolios online and we track patient histories via digital records.

There are so many things that I do routinely in the course of a day that simply were not an option for my parents, or even for me in my early career, IV pumps for routine use in the hospital, knowledge of infection control techniques, wound care protocols (that I still ask my mother about), and privacy acts to enforce. There was other technology as well that transformed nursing. Shortly before my dad and I started our practice, the Infuse-A-Port was introduced; this device changed the quality of care patients could receive, decreased pain, and improved their quality of life. And isn't that what nursing is about? Intravenous fluid pumps, which were once only available in the most high-tech hospitals, replaced the roller clamp for intravenous fluid and

medication regulation, helping decrease a nurse's workload and increasing client safety. Technology such as this, combined with economic changes such as diagnosis-related group [DRG] requirements by the government, paved the way for patients to leave the hospital sooner than ever before, increasing the required level of care at home. DRGs, the diagnosis-based payment system initiated by Medicare, caused a decreased length of stay in the hospital, resulting in a proliferation of home health services. This changed the face and focus of many nursing careers, including my father's. He started in home health in the mid-1990s, learning to interpret the new rules while learning to be a nurse in a new environment. His stories of the joys and pitfalls of home care encouraged me to eventually choose this route as well, and I became involved in caring for people at home. I eventually chose hospice as my passion – a place in nursing where becoming part of a family is almost necessary, and life changes for all those involved.

In ten years, perhaps you, too, may be writing an article on “how it used to be”. You will laugh at the procedures you did, at how long it took to get information, and at the medications that were being produced that will be obsolete at the time of your writing. And I hope you will be able to look back on the really important things other nurses taught you; like what it means to “be with” a patient and the difference between being a real nurse and a person “who performs tasks”.

Nursing has become not just a job or even a career, but part of who I am, mostly as a result of the investment of other nurses in my life. As a nursing student yet again, I am reminded that the nursing that my parents and their contemporaries practiced laid the foundation for the type of nursing I practice today. Nursing isn't what it used to be. Or, perhaps, it is more like what my mother envisioned when she started nursing: patients are important and health care professionals can work as a team to effectively advocate for them.

Vocabulary

archaic *a.* 已不通用的

sterile *a.* 无菌的

syringe *n.* 注射器

massage *n.* 按摩

specialize *v.* 专攻, 专门从事

bedpan *n.* (病人在床上用的) 便盆

glyburide *n.* 优降糖

glipizide *n.* 格列甲嗪

diabetic *n.* 糖尿病患者

nicotine *n.* 尼古丁

resin *n.* 树脂; nicotine resin complex 尼古丁树脂复合物 (戒烟药)

labetolol *n.* 拉贝洛尔

delusion *n.* 欺骗, 错觉

grandeur *n.* 伟大, 自命不凡

chart *v.* 记录, 记述
protocol *n.* 草案, 协议
clamp *n.* 夹子
proliferation *n.* 增殖
hospice *n.* 临终关怀, 临终关怀医院
advocate *vt.* 提倡; 主张

Reading Comprehension

Directions: *There are four suggested answers to each of the following questions. Choose the best one according to the passage you have just read.*

1. At the beginning, the author's mother is cited as an example showing_____.
 - A. the changes in nursing in the past 25 years
 - B. the importance of experience in nursing
 - C. the advantages of nursing 25 years ago
 - D. the qualities required for a good nurse
2. From second paragraph, we can infer that, before 1980s, nursing _____.
 - A. was not practiced out of the hospitals
 - B. was not based on theories and research
 - C. was not regarded as an essential discipline
 - D. was not thought of as essential to medicine
3. In the third paragraph, the author tends to convince that _____.
 - A. nurses should update themselves on information about medication
 - B. nursing in middle 1980's differs a great deal from that of today
 - C. computers may not be as important as some think in nursing
 - D. Medline played an important role in the evolution of nursing
4. The author chose nursing as her career because _____.
 - A. both of her parents chose nursing as their career
 - B. nothing else offered a better choice
 - C. she was destined to be a nurse
 - D. she was not good at numbers
5. What can be said of the author and her father in their education in nursing?
 - A. Her father actually mentored her about the real thing in nursing.
 - B. Her father followed the author's steps in college education.
 - C. The author and her father were mentored by Parker Palmer.
 - D. They both took Parker Palmer as an example to learn from.
6. Changes in nursing can be mainly ascribed to all the following factors EXCEPT_____.
 - A. theoretical development in nursing
 - B. medications produced in the past
 - C. technological achievements
 - D. economic changes

Passage 3

Directions: There are 10 blanks in the following passage. For each blank there are four choices marked **A**, **B**, **C**, and **D**. You should choose the ONE that best fits into the passage.

Philosophy has Plato, music has Mozart, art has Michelangelo, poetry has Dickinson, and nursing has Jeanne Quint Benoliel. I first met Jeanne over 40 years ago 'in the stacks' of the basement at the University of Iowa library. As I read her 1963 article, *The Impact of Mastectomy* (the first nursing research on the subject), she spoke directly to me. She had 1 these women's stories during 2 interviews with them. I had never read a nurse who had used research to 3 the hearts and minds and experiences of women. She opened a new world for me. I knew then that I had to meet this great woman. I joined the 4 at the University of Washington in whatever 5 she would hire me. I knew from day one I was 6 the presence of greatness. Jeanne and I were a good team; she was 7, and I was the clinical expert 8 her every observation. 9 Jeanne's brilliance, we built an oncology training and research team, and people came. They all came because they wanted to change the way 10 patients were cared for in the United States. We knew there had to be a better way.

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|-----|---------------|---------------|----------------|---------------|
| 1. | A. kidnapped | B. observed | C. captured | D. told |
| 2. | A. firsthand | B. secondhand | C. green hand | D. upper hand |
| 3. | A. get across | B. get over | C. get through | D. get into |
| 4. | A. department | B. team | C. faculty | D. hospital |
| 5. | A. discipline | B. position | C. specialty | D. major |
| 6. | A. in | B. at | C. out of | D. on |
| 7. | A. the brain | B. the heart | C. the body | D. the hand |
| 8. | A. reporting | B. Reasoning | C. validating | D. supporting |
| 9. | A. With | B. In | C. Of | D. To |
| 10. | A. deadly | B. dying | C. died | D. living |