PSA

Patient Safety America Newsletter

January 2014 http://PatientSafetyAmerica.com *John T. James, Ph.D.*

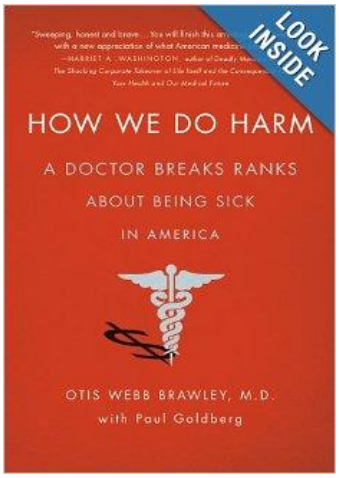
***Question**: Where does preventable medical harm rank among the causes of death in the U.S?*
a) first b) second c) third d) fourth e) fifth

Book Review:

How we do Harm – A Doctor Breaks Ranks about Being Sick in America

Otis Webb Brawley, MD

Dr. Brawley grew up in inner-city Detroit, perhaps there gaining his penchant for being combatively different. He was educated in Jesuit schools, major universities, the National Institute of Health, and eventually became an oncologist of high reputation. In the process he developed respect for science, especially as it applies to public health. His book builds upon his scientific instincts to pummel the way the medical industry saddles our nation with unscientific medical practices that cause widespread harm. It is not a book for those looking for pat answers on how the industry can be fixed to reduce medical harm. At its core, Brawley's thesis is that doctors and patients, if they can, must learn to distinguish between what they *believe* and what is *scientifically known*. Many things that would help both physicians and patients are not scientifically known, so beliefs, biased by profit motives (doctors) and fear motives (patients), prevail.



I like Brawley's raw style of writing that is unafraid to use labels such as "bullshit" to describe some of the behavior of the medical industry. He uses worse characterizations than that. He describes past lessons learned from his Jesuit instructors, or from one of his senior oncology colleagues. Sometimes the lessons passed down through generations of cancer doctors are wrong, but these persist because the early pioneers seem revered like gods. He laces in stories of individuals harmed because they had no access to medical care, they had access to bad care, or they were sent down a road of misguided overtreatment. Perhaps the most poignant story involves Ralph who made the mistake of showing up for free prostate cancer screening. His ensuing journey through the gauntlet of mistreatment and harm ultimately causes his death, but of course, his death certificate never says he was a victim of blind screening.

I especially like Brawley's insistence on using science to guide medical care. As a scientist, I know that is not as simple as the uninitiated might suppose. Perhaps this was clearest when Brawley describes the studies meant to determine the value of prostate cancer screening and the treatments that were available if one were found with cancer. He was right to warn about bias – often by drug companies or makers of clinical tests – that enters the discussions of the value of a specific procedure or test. In a late chapter he described the value of teaching science to patient advocates in the breast cancer arena (Project LEAD). I thought that such a course would be a good addition to the resumes of all members of Congress and leaders in the Department of Health and Human Services. Brawley concludes with the idea that medicine needs to "prove it" before charging off in some money-making direction, and we consumers need to learn to say "No" when proof is lacking.

The only things I did not like about the book were that the stories were often too long for my reading tastes and I think Brawley might have filled more pages on specific ways to impose science across the board in medical care. I gave the book 4 stars because it is a rare look at the intricate ways harm comes to patients who only feared cancer or wanted to be healed from this dreaded disease. Amazon: paperback $12, Kindle $8.

Safer Hospital Care for Children

A large team of investigators asked if implementation of a resident handoff bundle would be effective in reducing medical errors and preventable adverse event.[1] A handoff bundle in this context includes the following: communication training among doctors, standardization of verbal handoffs, integrating levels of verbal handoff communication (e.g. intern-to-intern and resident-to-resident were combined), and periodic oversight of the process by a senior resident or attending physician. The authors are unclear about their definitions, but it seems that medical errors include the following: 1) preventable adverse events (PAEs), 2) non-intercepted potential PAEs, 3) intercepted potential PAEs, and 4) medical errors with little potential for harm.

I was surprised to see that before the

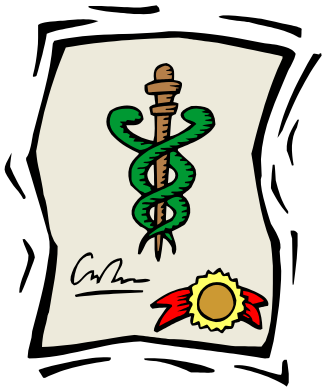
handoff-bundle intervention the number of medical errors was 34 per 100 admissions and the PAEs that caused harm were 3.3 per 100 admissions. After the intervention, the numbers dropped to 18 per 100 admissions and 1.5 per 100 admissions, respectively. The study was conducted on approximately 1250 children receiving treatment at Boston Children's Hospital. Poor handoffs are a major source of medical harm, so this 50% reduction in all recognized medical errors and all recognized, *harmful* medical errors are welcome indeed. From my point of view, this study shows how much better hospitals could do to reduce harm, if they all would just do it.

Medicine in the Ditch

When you drive on a modern paved road there are generally lines to guide you in staying in your lane. If you ignore these lines you may run off into the ditch or collide with an on-coming vehicle. Likewise in medicine there are guidelines to help physicians optimize the care of their patients, yet physicians often ignore guidelines to the great detriment of their patients. One of the MD champions of safer patient care, Peter Pronovost, wrote a viewpoint article in the *JAMA* outlining how physicians might be convinced to do a better job of following medical guidelines.[2] He suggested several strategies including the following: reforming lengthy guidelines into prioritized checklists, identifying barriers such as lack of knowledge or mistrust of guidelines that cause physicians not to use guidelines, and integrate guidelines across medical disciplines. I was a little surprised to see that Dr. Pronovost did not say that available quality rating systems for guidelines need to be applied to overlapping guidelines so clinicians know which one is best. Patients must be aware that there are guidelines for diagnosis and treatment of most diseases, so they must ask what guideline their physician is following. A cautious patient does not end up in the ditch.

Dying in America

Two MDs writing a perspective in the *New England Journal of Medicine* tell their experiences about what it is like to need medical care in our country and be uninsured.[3] They work in a clinic where 70% of their patients have no health insurance, hence they daily see the impact this has on lives. Their first story is about Mr. Davis who spent his last $10,000 on diagnostic procedures that showed he had metastatic colon cancer. He had work steadily for years, but had no consistent health insurance and was ineligible for Medicaid in Kentucky. He had been treating himself with enemas, but the pain had finally forced him to seek medical help without any health insurance. Not only was he now broke, he was soon to die.



The writers note that approximately 45,000 people die each year in America because they have no health insurance. They go on to place blame

exactly where I would – elected officials who deny Americans access to insurance. The doctors call for their colleagues to become more involved in forming legislation that would ultimately help people like Mr. Davis. The writers label the current condition "inhumane" and I would totally agree with that.

If we can spend $700 billion on military defense (39% of all money spent by all countries of the world), then why the hell can't we reprogram a small fraction of that money to help poor, working people get access to effective healthcare? Why can't we take a fraction of the $750 billion wasted on worthless medical care (30% of the $2.5 trillion spent each year on healthcare) and use it to help Americans like Mr. Davis?

Pass the Nuts

Nuts are one of my favorite foods. I take little bags of these on trips and use them to get through meal times when I do not want to search for a restaurant. Many of the bags have a bright red label declaring "Heart Healthy." A recent study has found that daily nut consumption is associated with a 20% reduction in all-cause mortality.[4] The large team of expert investigators looked at the data on approximately 120,000 persons followed for a total of more than 3 million person-years. The relative odds of death, compared to 1.00 for no nut consumption, dropped to 0.93 for those consuming nuts less than once per week, and then progressively dropped to 0.80 for those consuming nuts 7 times per week. The investigators note that their findings are consistent with other studies that were much smaller than theirs; however, they properly note that association does not prove causality. I'm going to keep eating nuts in any case, especially cashews.

Lung Cancer and Low-dose Computed Tomography (LDCT) Screening

Let's suppose you are in charge of clearing a mine field filled with active mines and dummy mines that cannot explode. Your search tool cannot tell which ones are which, so the only way you can tell for sure is to detonate, or attempt to detonate, each potentially active mine. Wouldn't you do your best to find a new tool that could distinguish the dummies from the real mines? Perhaps you would not if you were like doctors who use LDCT to look for lung tumors. A recent article in the *JAMA Internal Medicine* shows that screening for lung cancer in persons at high risk for lung cancer results in a high probability of over diagnosis, which is defined as the detection of a "cancer" that would otherwise not become clinically apparent.[5] The investigating team looked at more than 53,000 persons screened by LDCT and observed them for 6 ½ years afterward. There were about 1100 lung cancers detected by LDCT screening. The chances were almost 20 % that any "cancer" detected this way would be indolent – that is, it would never make a difference to the patient's health. Of course, over diagnosis leads to unnecessary patient anxiety, treatment, suffering, and in rare cases premature death. Obviously, this adds much to the cost of dealing with presumptive lung tumors.

It's time for the medical establishment to develop ways to determine which tumors are a threat to the patient's health and which ones are indolent. It's time to quit clearing the minefield in the dark just because money is made doing it that way.

Caring for Medicaid Patients

By most informed accounts the decision in Texas not to expand Medicaid, as financially backed by the Federal Government, was unreasonable. An MD writing in the *New England Journal of Medicine* pointed out that physicians are supposed to put the interest of patients first – and that includes poor patients.[6] He pointed out that about 1/3rd of office based physicians do not accept Medicaid

patients and the waiting time to see a physician for Medicaid patients is sometimes much longer than patients with private insurance. In many clinical settings the Medicaid payments are so low that practices lose money on each patient. Furthermore, dealing with the Medicaid bureaucracy is often challenging. None the less, this doctor strongly argues that physicians should devote 5% of their appointments to Medicaid patients. He views such a commitment as a demonstration of professionalism in a time when doctors are perceived by many policy makers as highly self-interested. In my opinion, none of this would matter if we had a well-run single payer system, unpoisoned by fee-for-service incentives.

No Mirrors, Please

Several things came together for me an hour ago. It all started just over a month ago when my body mass index was deemed to put me on the doorstep of "obese." Then came the pig-outs associated with Thanksgiving followed by the parties and drink that comes with the Christmas season. Although I had dropped 5 lbs between those holidays, I recovered my losses. Next I see a news show showing that some women have had a patch sewn on their tongues to induce pain if they eat any solid food. Their goal was to be attractive in a bikini, a goal I gave up some time ago. And finally, I have to review a medical article showing that even though one may be metabolically healthy (e.g. no diabetes), the risk of all-cause mortality or cardiovascular events is about 25% higher in metabolically normal, obese persons than in normal-weight individuals.[7] I don't like the idea of sewing a plastic patch on my tongue, so I hope you will join me in challenging the weight monster – that is if you need to as much as I do. I will post my progress each month in this newsletter and I welcome any feedback you may have on your success or weight-loss secrets.

References

1) Starmer AJ, Sectish TC, Simon DW, et al. Rates of medical errors and preventable events among hospitalized children following implementation of a resident handoff bundle. JAMA 2013; 310:2262-2270
2) Pronovost PJ. Enhancing physicians' use of clinical guidelines. JAMA 2103; 310:E1-E2
3) Stillman M, Tailor M. Dead man walking. N Engl J Med 2013; 369:1880-1881
4) Bao Y, Han J, Hu FB, et al. Association of nut consumption with total and cause-specific mortality. N Engl J Med 2013; 369:2001-2011
5) Patz EF Jr., Pinsky P, Gatsonis, C, et al. Overdiagnosis in low-dose computed tomography screening for lung cancer. : doi:10.1001/jamainternmed.2013.12738
6) Casalino LP. Professionalism and caring for medical patients – the 5% commitment? N Engl J Med 2013; 369:1775-1777
7) Kramer CK, Zinman B, Retnakaran R. Are metabolically healthy overweight and obesity benign conditions? Ann Intern Med 2013; 159:758-769

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Answer to question this month: c) third, not far behind cancer and heart disease (reference 2 and many others)