Question: What percentage of adult Americans are fully vaccinated? A) 40%  B) 50%  C) 60%  D) 70%

Book Review: The Premonition – A Pandemic Story
By Michael Lewis

I first heard about this book while watching a segment of the television program 60 Minutes. Michael Lewis, a writer known for great story telling, applies his talents to the saga of our current pandemic as seen through the eyes of experts whose voices could not be heard. Those with deaf ears include the Centers for Disease Control (CDC), state leaders, and Federal Government leaders. Lewis writes his story like a novel, including words and insights from those with knowledge of how to respond to a potential pandemic. He often traces their passion for discovery and social connectivity to their childhood influences. What makes a physician chose public health administration over private practice? It certainly is not income or fame. It is about saving lives.

Lewis traces knowledge obtained from previous pandemics and epidemics, describing how this was never well applied to our current pandemic by those in authority, including the CDC. His collection of missed opportunities to improve our response runs to about a half dozen. These include poor rollout of diagnostic tests, poor availability of tools to implement testing, and refusal to use available genetic testing of the coronavirus. Lewis has chosen interesting, dedicated, frustrated, and smart people to illustrate fundamental problems in the way we have responded to the pandemic. Sometimes, there is a breakthrough of the bureaucracy that enables those with ‘premonition’ and knowledge to be heard. There are heroes, driven by passion for saving lives, and there are villains, driven by passion for revenue.

Lewis’ bottom line message is that leaders facing the possibility of a pandemic must be prepared to make decisions based on incomplete information and unproven models of viral spread. Given that an unpopular decision was made, they must be prepared to be pilloried if, on hindsight, their decision was not the best one. The weaving of science and storytelling makes this an exciting read. Less than $20.

Peripheral Artery Surgery?

Two MDs wrote their perspective (https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2780093) on recent studies comparing drug-eluting stents with non-eluting stents for peripheral artery disease (PAD). The studies are mixed on whether the eluting stent is better than the non-eluting stent, but that is not the point of their perspective. The key point is that there may be much overuse of stents for PAD when smoking cessation, organized exercise, and suitable medications (guideline specified) may be better. The writers point out that in a recent study that had a 2.7 year follow up period, more than half of the patients died regardless of which stent was used. Medicare
claims for such stents increased more than 30% from 2011 to 2017.

The authors opine that this is not likely due to a surge in cases that require stent placement. The message for patients is to insist on full disclosure of options when diagnosed with PAD. Ask about benefits and risks of each option. Remember that risk entails both the severity of the unwanted outcome and the probability that it might happen. A 50% risk of death in less than 3 years might sway patients to less invasive therapy.

**Overuse of Testing in Hospitals**

A team of researchers looked at Medicare fee-for-service claims from 2015 and ending in 2017 ([https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2779118](https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2779118)). They selected patients at hospitals that performed 7 or more of the targeted services. Their search included 2,400 hospitals and 1,260,000 patient claims. The average age of the patients was 74 years.

Of the overused tests studied, the most common, at 30% of patients, was head scan for syncope patients. The second most common overused test, at 16%, was coronary artery stent insertion in stable heart patients. Third most prevalent overused test was carotid artery imaging in syncope patients at 11%. The most overuse happened in southern hospitals that were non-teaching and for-profit.

Patients have a role in curtailing overuse through shared decision-making. When a test is proposed for you in a hospital, make sure you know the specific purpose and the benefits and risks of the procedure. Ask what guideline is being applied to support the value of the test. The money wasted in low-value testing may be as much as $100 billion per year.

In a separate article two experts give their opinion of how low-value care can be reduced ([https://jamanetwork.com/journals/jama/article-abstract/2778598](https://jamanetwork.com/journals/jama/article-abstract/2778598)). They define such care as ‘use of a health service for which harm or costs outweigh the benefits.’ It is easy to suggest that overuse happens mostly in fee-for-service institutions, but this is far from the whole truth. In many studies that show plenty of overuse, the systems were not fee-for-service. How can overuse be reduced? They suggest 4 ways: develop and use valid ways to measure overuse across a given system, develop a roadmap for de-adoption of overused procedures in systems, find ways to align less overuse with the motives of physicians and patients, and leverage electronic health record systems to call-out potential overuse during procedure ordering. Again, I would emphasize the role of patients, through shared decision making, to maintain a preference only for useful tests.

**Rates of Surgical Errors**

A team of investigators asked about strategies to reduce the number of serious mistakes associated with elective surgery in hospitals ([https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2779420](https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2779420)). These are called ‘never events’ and are rare during surgery. None-the-less, such mistakes may include left-behind objects, wrong-site or wrong-patient surgery, or surgical burns. From 2007 to 2017 records in California identified 142 such surgical events. There were several policies adopted during the period, including improved communication during surgery and use of checklists. This study reminds me to caution patients that have decided, through a process of shared decision-making, that surgery is their best option. They should ask about practices like use of checklists to ensure that their surgery is as safe as possible. The rate of reported surgical never events in this study was only 1 in 200,000, so the probability of a nasty never event is quite low, hence your risk is low. If you believe the reporting.

**Diagnosis and Management of Headache**

Nearly everyone sometime in their life experiences headaches. I offer this summary to convey a little more about headaches should you be thinking about seeking medical care to mitigate yours. An MD working in a neurology department at a major medical center in New York wrote an educational review for physicians reading the JAMA. There are two broad types of headaches – primary and secondary.

Primary headache types include migraine, tension-based, trigeminal autonomic cephalalgias (unilateral head pain occurring in association with same-side cranial autonomic symptoms such as tearing or drooping eyelids), and other. Secondary headaches are classified according to their cause –
vascular, neoplastic, infectious, or pressure based. The author provides a table for differential diagnosis, acute treatment, and prevention of the 3 types of primary headaches (excluding ‘other’). Throughout the article, the author’s focus is on management of migraine headaches.

If you have headaches that are serious enough to ruin major parts of your day, even occasionally, I suggest reading this article (https://jamanetwork.com/journals/jama/article-abstract/2779823) with an online medical dictionary handy. It will prepare you for engaging in shared decision-making with your clinician. There are many possible treatments, some of which may cause serious side effects. The Mayo Clinic provides some simple strategies for managing migraine headaches (https://www.mayoclinic.org/diseases-conditions/migraine-headache/in-depth/migraines/art-20047242).

**Continuing Opioid Deaths**

Three PhDs wrote about opioid poisoning (https://jamanetwork.com/journals/jama/article-abstract/2776544). Deaths from opioids have increased steadily in the US since about 1990 with a transition in recent years to synthetic opioids such as easily manufactured fentanyl and its derivatives, which have replaced heroine in some illicit drug distribution areas. The authors cite CDC figures from 2019 showing that more than 70,000 Americans died of drug overdose, and that 71% of these involved opioids.

Fentanyl is especially potent for persons that have never used it or have stopped using the drug. The pandemic has curtailed the access of patients to support services. There are effective drug treatments for opioid use disorder. A holistic approach to care for those with opioid use disorder includes treatment for mental problems and access to employment, transportation, and decent housing. Evidence suggests that policing alone is not going to fix the drug abuse problem. The authors suggest roles for clinicians and health systems in mitigating drug abuse. I would suggest that any system seeking to reduce drug abuse must involve the family of the victim. Drug abuse must be seen as an addiction illness, not an opportunity to blame the victim of the illness.

In a somewhat related study, a team of investigators examined the causes of drug-induced suicide from several sources from 2011 to 2016. (https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2763226). They found that opioids were the most common cause of drug-induced suicide deaths (33-48%). This was not due to opioids being the most commonly used drug in suicide attempts. It is likely due to the ‘relative risk of death’ when this class of drugs is used. For this class of drugs, the chances of death were 5.2 times the average for all other drugs used in suicide attempts. The relative death risk of barbiturates was 4.3. The authors opine that better packaging and storage of the most lethal drugs must be practiced.

**Patient Preferences for Deprescribing**

Deprescribing is the process in which clinicians convince a patient that a drug prescribed to them should be discontinued. Investigators (https://pubmed.ncbi.nlm.nih.gov/33818621/) used two vignettes: one a statin prescribed to a functionally limited, older adult with polypharmacy, and the other an insomnia drug (sedative) in a person with normal function. They asked 7 questions of their survey respondents for each of the vignettes regarding what approach would be most effective in convincing them that a drug should be eliminated. They captured responses from 835 people with an average age of 73 years in March and April 2020.

The most convincing reason for deprescribing a statin or sedative was the risk of side effects compared to the likely benefits in both vignettes. For the statin user, the second most effective was ‘I think it could be harmful for you to be on this many medications.’ For the sedative user, the second most effective phrase was ‘This medicine is not good for you in the long run. Let’s work together to slowly reduce your dose.’

There are two points to be made for patients. The first is that you must be aware of the side effects of any drug you are taking, and if you are taking 5 or more drugs, then ask your doctor to consider deprescribing one or more of them. Involvement of a pharmacist in this process could be helpful. The second point is that if your clinician attempts to suggest deprescribing of a drug, then listen carefully.
Excess COVID Deaths

In a research letter, investigators attempted to estimate the excess deaths in the US due to COVID from March 1, 2020, through January 2, 2021 (https://pubmed.ncbi.nlm.nih.gov/33797550/). The baseline number of deaths expected in this 10-month interval was 2,280,000, whereas the actual number of deaths was 2,800,000, for an excess number of deaths of 520,000. The authors compared excess death rates due to COVID in each state. The highest state was Rhode Island at 111/100,000 excess deaths, and the lowest death rate was 28/100,000 in Vermont. For my readers in Texas, the excess death rate was 68/100,000. The authors note that the excess death rates are not strictly due to COVID but may be related to secondary effects, such as pandemic-related fear that kept people from seeking medical care they needed. Through May 22, 2021, the CDC’s death count (direct or contributing cause of death) from COVID was 580,000 (https://www.cdc.gov/nchs/covid19/mortality-overview.htm).

Expert opinion on transmission of COVID virus and CDC’s stumble: https://www.unionleader.com/opinion/op-eds/paul-bemis-whose-idea-was-the-plexiglass/article_03a541e7-845d-5df1-8555-3de4dbd24004.html?utm_medium=social&utm_source=facebook&utm_campaign=user-share&fbclid=IwAR2L4EbZbYdJACyb1Y44f4RxAOHygOMEUapKvXF5JULoNXutZ4Dg_44OqHW

COVID transmission in Maryland (great graphics): https://www.cdc.gov/mmwr/volumes/70/wr/mm7017a5.htm?s_cid=mm7017a5_w


Find past newsletters: http://patientsafetyamerica.com/e-newsletter/

Answer to question: best answer is B) 50% as of May 25th. 50 percent of US adults are now fully vaccinated against COVID-19, according to CDC data (msn.com)