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Overdiagnosed: *Making people sick in the pursuit of health*

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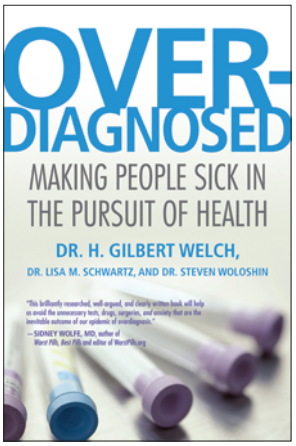
Book Review

“Primum non nocere.” I first heard those words very early in my medical school experience. “First do no harm” became a guiding principle during my professional career and, I hope, served me and my patients well. I quickly learned there was a lot we could do for our patients, but it was much more important to know what we should do for our patients to improve their health. Time has moved on, and so have the effectiveness and risks of our treatments and our technologies. There is now a robust market for improving technology, for inventing the next great test, for making the next big machine. Perhaps now, more than ever, it is time to raise our collective consciousness and ask whether what we can do to our patients truly improves their health or their quality of life. That, to me, is the central tenet of Gilbert Welch’s recently published Overdiagnosed. Skillfully and carefully, in words that the educated layperson can understand, Welch lays out the premise that our technology and our treatments have taken us places that have provided effective treatments for some, but may be causing harm to others. We have entered an era in which we can find diseases and illnesses in many more people — thus giving them a lifetime of “illness” — but it is […]



Overdiagnosed

Making people sick in the pursuit of health

H. Gilbert Welch, Lisa M. Schwartz, and Steve Woloshin
Beacon Press. Boston, Massachusetts, USA. 2011.
248 pp. $24.95. ISBN: 978-0-807-02200-9 (hardcover).

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"*Primum non nocere*." I first heard those words very early in my medical school experience. "First do no harm" became a guiding principle during my professional career and, I hope, served me and my patients well. I quickly learned there was a lot we *could* do for our patients, but it was much more important to know what we *should* do for our patients to improve their health.

Time has moved on, and so have the effectiveness and risks of our treatments and our technologies. There is now a robust market for improving technology, for inventing the next great test, for making the next big machine. Perhaps now, more than ever, it is time to raise our collective consciousness and ask whether what we can do to our patients truly improves their health or their quality of life. That, to me, is the central tenet of Gilbert Welch's recently published *Overdiagnosed*.

Skillfully and carefully, in words that the educated layperson can understand, Welch lays out the premise that our technology and our treatments have taken us places that have provided effective treatments for some, but may be causing harm to others. We have entered an era in which we can find diseases and illnesses in many more people — thus giving them a lifetime of "illness" — but it is not clear that, by making everyone a patient, we are necessarily improving their health.

The author is careful to point out that for those who have serious medical problems, such as significantly elevated blood pressure, blood glucose levels, or cholesterol, medicines have been proven through clinical trials to be effective in preventing their chronic diseases' frequent and dire consequences. But as we have moved the diagnostic thresholds lower and lower, we tend to bring many more people into the fold of patienthood with diseases that demand treatment according to guidelines and/or current practice standards, without understanding or contemplating that the marginal benefit may in fact be very marginal.

Welch also correctly and appropriately highlights that there are many circumstances in which the medical evidence of benefit doesn't support the clinical use of a test or procedure, yet custom demands that it be done, lest a poor outcome be blamed on the physician or other health professional, and substantial damages awarded in the inevitable malpractice case. A notable example is fetal monitoring during the delivery of pregnant women.

He provides several examples from his own practice and life experience that buttress the central message of the book: that sometimes the treatment can be worse than the disease. I suspect many primary care health professionals can relate to the examples he offers, since they have had similar experiences with their patients, their families, or themselves.

As Welch points out, our technology has implications we physicians frequently don't take into account, such as diagnosing someone with a disease that then prevents them from getting health insurance or interferes with their prospects for employment. And although the medical community may not consider or even be aware of these consequences, they are very real problems in the very real world we live in.

The author writes at length that we screen for various diseases without solid evidence that such screening in fact saves lives, a prime example being the PSA test to screen for prostate cancer. Well explained in the book is the premise that there is a lack of evidence that this test saves lives from prostate cancer, but there can be real damage and substantial cost associated with treating this disease in men for whom it may never affect their health or their survival. The ranks of prostate cancer survivors are many, and they are frequently convinced that the PSA test saved their lives. They ignore (or are not aware of) the fact that the PSA test may be a random walk, given that many men have prostate cancer with a normal PSA, many men have an elevated PSA without prostate cancer, and some men have prostate cancer diagnosed early with the PSA test, yet go on to develop metastatic disease years later.

Unfortunately, there are many health professionals not well versed on the issues outlined in *Overdiagnosed*, such as the practical implications of the difference between absolute and relative risk, and there aren't many patients who wish to delve into those issues before they decide to have a test or procedure. The inevitable result is that much of what we do will become fairly standard and measured as we build more expectations into our electronic medical record systems.

If we are ever going to resolve these issues, we must take a step back from our infatuation with technology and our belief that finding and treating every abnormality early is always a good thing and is going to improve the health of our population. We are going to have to accept the reality that every decision we make and everything we do will not result in a perfect outcome, especially when the actual chances of benefit are in fact quite negligible.

Welch does us all a service by providing a highly readable, interesting book underscoring the point that although "First do no harm" may be tried and true, that doesn't make it any less valuable in guiding us to improve the health of those we serve.