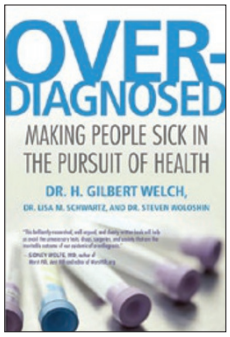
Too much treatment?



Overdiagnosed: Making People Sick in the Pursuit of Health

H. Gilbert Welch, Lisa Schwartz and Steve Woloshin

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Reviewed by Robert Aronowitz

A friend recently developed a stress fracture that might have been caused by a medicine she was taking to prevent osteoporosis. Shortly afterward, her husband's blood pressure was found to be slightly elevated during a routine checkup. I would have thought that he would hesitate to treat asymptomatic risk factors after his wife's experience, but instead he demanded that his wavering physician immediately prescribe an antihypertensive medication.

From H. Gilbert Welch's and his co-authors' perspective, both my friends and their physicians are caught in the web of overdiagnosis. The authors' main contention is that "as we expand treatment to people with progressively milder abnormalities, their potential to benefit from treatment becomes progressively smaller." This can be true whether we are lowering thresholds for diabetes or hypertension, or defining 'earlier' stages of cancer. Inevitably, we enter a "cycle of seeing more, finding more and doing more," in which physicians have gradually shifted from making diagnoses based on symptoms to using overly sensitive technologies to scan bodies for abnormalities. Although justified by a slight chance of benefit, these 'fishing expeditions' can lead to harm and waste, such as the workup of 'incidentalomas' that increasingly dominate medical care.

According to the authors, overdiagnosis is identifying conditions in patients that are unlikely to ever cause overt illness. Although clearly visible at the population level, overdiagnosis for the individual is only clear if the targeted condition never develops or iatrogenic harm ensues. The authors' calculations of aggregate benefit and harm, often expressed by the 'numbers needed to diagnose/treat' metric, can provide guidance for what individuals should do. But in many cases it's a tough call: some 30 to 100 people with screening-detected prostate cancer will undergo surgery or radiation for only one life to be saved from prostate cancer. The authors don't seem convinced by this statistic that such screenings are worthwhile, but they are understandably cautious not to infringe on individual choice and ask the reader to make his or her own decision. Welch, in particular, makes clear he would not opt for many recommended practices. He will even take a pass on his next screening colonoscopy, despite his father's death at age 60 from colon cancer.

Overdiagnosed has some overlap with the authors' previous *Should I Be Tested for Cancer?* (the answer, most often, is no), but the new book covers noncancerous conditions, adds routine clinical diagnosis to the first book's focus on cancer screening and grapples with the forces that sustain overdiagnosis and overtreatment. Most compelling are the authors' observations of doctors who feel trapped by incidental findings, ordering tests that they know can produce more harm than good. The same physician may enjoy telling one expectant mother that everything looks fine on a fetal ultrasound while being haunted by abnormalities of uncertain significance in another.

Although some readers may think *Overdiagnosed* already leaves no prisoners, the authors hardly mention two other lines of criticism. One is the way early diagnosis and treatment is an individualistic approach that diverts our resources from the social determinants of health and population-level interventions. The authors also pay little attention to the financial costs of overdiagnosis, preferring to emphasize the costs to health and peace of mind.

The authors also diagnose the drivers of overdiagnosis. Economic incentives encourage it. Specialism can lead to exaggerated perceptions of the specialist's disease's prevalence and importance. We have a one-sided legal system that punishes under- but not overdiagnosis. Driving overdiagnosis is also what I call the social or psychological efficacy of different screening and diagnostic practices. Patients want to reduce their fear of disease, reassert some control over uncertainty and avoid anticipated regret.

What is to be done about overdiagnosis? Mobilizing the overdiagnosed for change is difficult, because they are often invisible and form no natural constituency. And it can be difficult to disagree with a doctor intent on doing routine tests. The authors hope that more high-quality randomized trials will come to the rescue. But the book's exploration of the complex social web that sustains overdiagnosis makes me less optimistic that evidence alone will do much. Such evidence does not address these inertial forces, and there are pragmatic, ethical and financial reasons why such trials may never be done.

The authors instead promote "healthy skepticism" that helps maintain one's health. Partly this means accepting that some aspects of health are beyond individual control and accepting some small risk of death or disability to avoid overdiagnosis and overtreatment. And, as wellness is in unavoidable tension with looking for disease, we may want to ignore some knowable risks. According to the authors, healthy skeptics should allow their doctors not "to search indiscriminately for things to be wrong."

I think we also need to intervene upstream from the point at which doctors and consumers make individual decisions, such as in the discovery and marketing of new risks and interventions. Much overdiagnosis is embedded in entrepreneurial styles of medical practice and the culture of health care, which we are only beginning to understand and influence by new policy initiatives. Curbing our overdiagnosis enthusiasm will not be easy, but this book suggests ways to begin doing it.

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