

# THE MAMMOGRAPHY WARS; NOW IN THE MEDIA

Lawrence I. Bonchek, M.D., F.A.C.C., F.A.C.S.  
*Editor in Chief*



Screening mammography has generated more controversy than any other current cancer prevention tool. To summarize briefly, the controversy was exacerbated in 2009 when the US Preventive Services Task Force stopped recommending that women aged 40-49 undergo routine screening mammography every 1-2 years and advised physicians to individualize recommendations based on the patients' circumstances and attitudes. Further, they advised women aged 50 to 74 to have mammography every other year, while women over 75 should not have routine mammography.

The controversy erupted further in 2012 with articles in the *New England Journal of Medicine*<sup>1-3</sup> which drew attention to what the authors felt was little evidence that mammography's benefits exceeded its harms. These include: overdiagnosis of cancers that would never become clinically significant; the anxiety provoked by false positives; and the often needless biopsies provoked by equivocal mammograms.

At that time we discussed the NEJM articles in an editorial<sup>4</sup> and in several other articles, including a round table discussion, all intended to bring some clarity to a scientifically muddled and constantly mutating topic.<sup>5-8</sup>

Now the controversy has been re-energized by the publication of a twenty-five year follow-up of the Canadian National Breast Screening Study which concluded: "Annual mammography in women aged 40-59 does not reduce mortality from breast cancer beyond that of physical examination or usual care when adjuvant therapy for breast cancer is freely available. Overall, 22% (106/484) of screen detected invasive breast cancers were over-diagnosed, representing one over-diagnosed breast cancer for every 424 women who received mammography screening in the trial."

In order to present a balanced, overview of relevant literature and its criticisms, I asked Drs. Oyer, Peterson, and Tanna, who participated in our previous roundtable, to offer their current perspectives on this topic. Their current recommendations can be found in this issue in: Screening Mammography, An Update.

In the remainder of this column I'd like to comment on a defense of mammography that appeared in the *Wall St. Journal* on May 27, 2014.<sup>10</sup> Written by Dr. Daniel B. Kopans, Professor of Radiology at Harvard Medical School and Senior Radiologist at the Breast Imaging Division of Massachusetts General Hospital, it carried the confrontational title: "Mammograms Save Lives; Criticism of breast-cancer screenings is more about *rationing* than *rationality*"<sup>10</sup> (italics mine).

Dr. Kopans has been an outspoken voice in the mammography debates in conventional scientific channels where intellectual disagreements are essential to medical progress. These include peer-reviewed journals and the official response of the Society of Breast Imaging, where he has correctly asserted that data about mammography's benefits and harms have notable shortcomings.

Of course if the data were perfect there wouldn't be such a persistent international debate in the scientific community, so he is forging new ground when he takes his case to the lay press, where he is not bound by the constraints of civil medical discourse, nor by the tempering influence of the editors of peer-reviewed journals.

In the lay press controversy sells, and Dr. Kopans is free—perhaps is even encouraged by the editor of the *WSJ*—to call his critics "irrational." Of course he's entitled to his opinion about what constitutes "rationality," even if, in offering that opinion, he is being irrational himself, but it's a term we don't ordinarily encounter in scientific debate.

Regardless of what is or isn't "reasonable" about the diagnostic accuracy of mammography, Kopans embarks on his own distinctly unreasonable path when he makes the further assertion, both in his title and in the text of his article, that attempts to pare back the indications for mammography are actually a form of "rationing." He twice assails "efforts to reduce access to lifesaving screening tests, particularly for breast cancer . . ."

He is way off base with his accusation that any suggested reduction in the frequency of mammography is a plot to limit access, and that considerations of cost are tantamount to rationing. I don't doubt that the

“R” word appeals to the editor and readers of the *WSJ*, who generally abhor anything that hints at government intrusion, but in the real world it is now universally acknowledged that health care resources are not infinite; that health care choices can and should take cost into account; and that cost considerations are neither synonymous with arbitrary “limits on access” nor a form of rationing. Rather, the search for value is an essential part of assuring that we don’t waste limited resources on unproductive measures so we can focus those resources on effective ones. Ironically, the question is moot in this case since the ACA specifically mandates insurance coverage for mammograms beginning at age 40.

Dr. Kopans’ assertion is particularly bizarre in this instance, since it’s quite a stretch to suggest that a *Canadian* study, published in the *British Medical Journal*, is attempting to influence health policy and reduce access to care in the *United States*.

By Kopans’ criteria, the country of Switzerland could be labeled “irrational.” An expert panel\* of The Swiss Medical Board, an NGO under the auspices of the Conference of Health Ministers of the Swiss Cantons, the Swiss Medical Association, and the Swiss Academy of Medical Sciences, reviewed mammography screening and recommended that no new systematic mammography screening programs be introduced and that a time limit be placed on existing programs.<sup>11</sup> (It should be noted that acceptance of this recommendation has been spotty in Switzerland, somewhat akin to the reaction here to the recommendations of the U.S. Preventive Services Task Force, which we have discussed in previous issues of the *Journal*.<sup>4,5,7</sup>)

For all these reasons, I find Dr. Kopans’ article objectionable. By taking his case to a scientifically unsophisticated lay public he asks them to make a health policy decision that arouses reasonable disagreement among well-informed medical experts. It is difficult enough for individual physicians to counsel individual patients even when they have some understanding of the patient’s particular circumstances and concerns. Generalizations in the lay press cannot be more accurate or useful.

I welcome other views on this matter.

#### ANOTHER MEDICAL MYTH DEBUNKED

Dr. Ketan Kulkarni’s discussion of Colon Cleansing continues our series on the theme: “debunking medical myths.” Colon cleansing is a pointless and potentially harmful fad that has gained considerable popularity.

The public has always been exploited by hucksters making false claims about various nostrums, but modern snake-oil salesmen have the internet, daytime TV, and infomercials to promote their spurious claims. Still, the popularity of colon cleansing has particularly mystified me, since it takes more than simply tossing some fruits and vegetables in the blender. For colonoscopy, the prep is unequivocally the worst part of the experience! Why would anyone inflict this on themselves without a doctor’s order?

I am particularly distressed by its promotion on the Dr. Oz Show, which has a great deal of influence, not least because Mehmet Oz has legitimate credentials as a cardiac surgeon at New York-Presbyterian Medical Center. (Full disclosure: Back when Mehmet Oz was a rising young surgeon not a daytime TV star, I spoke with him many times at the national meetings of our professional Thoracic Surgery societies about his interest in the patient’s state of mind as an influence on recovery. He applied that concern in his practice, and it promised to be a productive exploration of holistic care.)

It quickly became apparent, however, that he was embracing a variety of increasingly offbeat and undocumented alternative practices for which there is no scientific evidence. His colleagues in New York City sometimes found them disconcerting, and in a *New Yorker* magazine article about Oz that appeared in February, 2013, his former Chief at New York-Presbyterian, Dr. Eric Rose, characterized some of these measures as “wacky.”<sup>12</sup>

One such alternative practice the *New Yorker* mentions is Reiki, the Japanese version of the ancient belief in laying on of hands to “harness the body’s energy.” Though there is no scientific evidence of Reiki’s validity, Oz often brought a Reiki master into his operating room. In the *New Yorker* Oz claims he simply wanted to offer his patients “all the options,” but if so, he also had a responsibility to help patients choose between evidence-based therapies and those based solely on speculation. Unproven interventions are—at best—expensive placebos, but at worst they delay or prevent proper treatment.

Because his audience is so large, many patients probably watch The Dr. Oz Show, and it is important to know that Oz has become principally an entertainer, a role he clearly relishes. He could have seized the opportunity to be informative and useful, but he uses his platform and his influential voice to promote numerous unproven health products and strategies, of which colon cleansing is just one.

\*The panel consisted of a medical ethicist, a clinical epidemiologist, a clinical pharmacologist, an oncologic surgeon, a nurse scientist, a lawyer, and a health economist.

As a typical example, the website for his show of Nov. 9, 2012 contains a promotion for “Dr. Oz’s 3-Day Detox Cleanse One-Sheet; Eliminate harmful toxins and reset your body with this detox cleanse from Dr. Oz. All you need is 3 days, a blender, and \$16 a day!” It contains a “One-Sheet” list (for convenient supermarket shopping) of various common fruits and vegetables, all to be processed in a blender with coconut water, almond milk, and green tea. Though these are harmless and even healthful foods, it’s hard to see how they will “eliminate toxins” from your body in 3 days, nor what these toxins are. As Dr. Kulkarni points out in his article, the liver is the mainstay of detoxification.

#### ALSO IN THIS ISSUE

In addition to the above two pieces, this issue contains a diverse group of interesting and clinically relevant articles:

**Dr. Joseluis Ibarra** from the Preventive Cardiology and Apheresis Clinic discusses the initiation of the Familial Hypercholesterolemia Initiative in this community, designed to achieve earlier identification and treatment of this disease and prevent its devastating consequences.

**Dr. Lee M. Duke**, Chief Physician Executive, discusses how Lancaster General Health has embarked on a far-sighted and comprehensive plan to change the traditional model of health care administration and clinical care, which has become increasingly unsustainable because it is insufficiently integrated and thus inefficient. Its commitment to individual accountability and autonomy for physicians often sacrifices teamwork, standardization, and collegiality, and focuses on episodic care and short term results. A reorganization process for the medical staff has

integrated physicians into the system’s paid leadership and administrative structure.

**Dr. Rupal Dumasia** of The Heart Group of Lancaster General Health explains why the Symplicity Trial of renal denervation for hypertension has been discontinued. Although the 6 month interim results of the GLOBAL SYMPPLICITY Registry (not the trial) did show substantial lowering of BP compared with baseline, BP in trial patients was not significantly lowered in comparison with a sham procedure. Dr. Dumasia discusses the implications of this difference in results and what it may mean for this approach to hypertension.

**Mr. Nels Carroll**, a third-year medical student, writes about the importance of mentors in the learning process, even while technology’s role is growing. His perspective will provide encouragement to all those who commit their time and energy to teaching medical students.

**Associate General Counsel Christopher M. O’Connor** provides a vital discussion of two recent cases in the news that highlight society’s continuing difficulties managing comatose individuals on life support. Sometimes it is not possible to reconcile the legal status of brain death with the interests of the state, the patients, their kin, and sometimes even a fetus.

In a related article, **Dr. Thomas Miller** of Palliative Medicine Consultants discusses the delicate subject of how to talk with patients and their families about DNR orders.

Finally, **Dr. Alan Peterson** provides another in his engaging series of articles about the Choosing Wisely guidelines, and his section on Top Tips.

All in all, I hope you agree this is a diverse and intriguing issue!

#### REFERENCES

1. Woloshin S, Schwartz LM, Black WC, and Kramer BS. Cancer screening campaigns – getting past uninformative persuasion. *N Engl J Med* 2012; 367:1677-1679. November 1, 2012 DOI: 10.1056/NEJMp1209407
2. Bleyer A, Welch HG. Effect of three decades of screening mammography on breast-cancer incidence. *N Engl J Med* 2012; 367:1998-2005
3. Kerlikowske K et al. Mammography screening for breast cancer. *N Engl J Med* 2012; 367:e31 November 22, 2012 DOI: 10.1056/NEJMe1212888
4. Bonchek, LI. On controversial screening for cancer. *J Lanc Gen Hosp*. 2012; 7:97-99
5. Oyer, RA, Peterson, AS, Tanna, N. The controversy over screening mammography; a roundtable discussion of its current indications and uses. *J Lanc Gen Hosp*. 2013; 8: 4-13
6. Dodge, DG and Kegel, JL. Advances in breast cancer screening and diagnosis *J Lanc Gen Hosp*. 2006; 1:47-51
7. Tanna NK. Controversy in screening mammography. *J Lanc Gen Hosp*. 2010; 5(3): 80-86.
8. Peterson, AS. The debate is over; recent Swedish study shows great survival benefit from mammography between ages 40-49. 2010; 5:110-111.
9. Miller, AB, Wall, C, Baines, CJ, et al. Twenty five year follow-up for breast cancer incidence and mortality of the Canadian National Breast Screening Study: randomised screening trial. *BMJ* 2014;348:g366. dx.doi.org/10.1136/bmj.g366
10. Kopans, DB. online.wsj.com/news/articles/SB10001424052702304547704579564440536353948?KEYWORDS=kopans&mg=reno64-wsj
11. Biller-Andorno, N, and Jüni, P. Abolishing mammography screening programs? A view from the Swiss Medical Board. *N Engl J Med* 2014; 370:1965-1967 May 22, 2014 DOI: 10.1056/NEJMp1401875 www.nejm.org/doi/full/10.1056/NEJMp1401875
12. www.newyorker.com/reporting/2013/02/04/130204fa\_fact\_specter?currentPage=all
13. www.doctoroz.com/videos/dr-ozs-3-day-detox-cleanse-one-sheet