

It is time to stop screening all women with mammography based on age alone

The early detection of breast cancer by mammography has been promoted in the Western world for decades, usually for all women 40-70+. Mammography involves an x-ray of the breasts while under compression. While mammography screening was once thought to reduce breast cancer mortality by 29%, there is increasing evidence that harms outweigh benefits.

There are two recent important reports about the effectiveness of mammography screening. The 2013 Cochrane Collaboration systematic review reported there is no reliable evidence that mammography screening of healthy women in a targeted age group reduces mortality but there is evidence of harm from false-positive results, overdiagnosis and unnecessary treatment, and significant psychological distress. False positive results occur when a woman is incorrectly identified as having a potential breast cancer and occurs in up to 60% of women screened ten times. This results in further tests including additional mammography, ultrasound studies and biopsies. Overdiagnosis refers to the diagnosis of 'breast cancers' in screened women that would never have become apparent or caused harm in their lifetime, including cases of ductal carcinoma in situ (DCIS) and cancers that would have spontaneously regressed. Overdiagnosis results in unnecessary treatment with surgery (including mastectomy), radiation, and chemotherapy, all of which increase the risk of death. Overdiagnosis of breast cancer has been estimated as high as 52% when DCIS is included. False positive findings and overdiagnosis can cause significant psychological distress and is an inefficient use of health care resources. In plain language, the Cochrane Collaboration estimates that for every 2000 women invited for screening for 10 years, 1 would avoid dying of cancer, 10 would be diagnosed and treated unnecessarily, and 200 would experience significant psychological distress. They content that significant improvements in treatment combined with women's greater awareness of breast cancer are the cause of any breast cancer mortality reduction and not mammography screening as widely reported.

Similarly, in 2014 the Canadian National Breast Screening Study released its 25-year follow up results that annual mammography did not reduce breast cancer mortality in women aged 40-59 years compared with that achieved through clinical breast examination and usual available care. They reported that up to 50% of breast cancers detected were overdiagnosed.

The Cochrane Collaboration considers their review to be stable, meaning there is no new evidence forthcoming to influence their recommendations. Both the Cochrane Collaboration and the Canadian National Breast Screening Study authors call on policymakers to reassess whether mammography screening should be offered to all women of any age.

This is a difficult policy change to make. For years, governments, health professionals, and screening advocates have widely promoted mammography screening. In the Western world, it is positioned as the only reliable screening method. However, it is time to discontinue screening all

women based on age alone. Resources can be more efficiently directed toward surveillance of women at higher risk or follow up of women with early changes of potential breast cancer. “Watchful waiting” of DCIS and other changes that do not appear to pose a short-term risk is a preferred approach to unnecessary cancer treatment of women who are well.

The overreliance on mammography screening has not worked. As there are no new screening technologies proven to be better than mammography, it is time to invest research money into the evaluation of clinical breast examination and breast self examination as legitimate screening methods.

While this policy change takes effect, women must be given balanced information about the benefits and harms of mammography screening, in plain language, so they can make an informed decision about whether to be screened. A woman’s choice not to have mammography screening should be supported.

Publication

[Viewpoint: It is time to reconsider policy for population-based mammography screening.](#)

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