

# New study adds to evidence that mammograms do not save lives

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(Reuters) - A new study has added to growing evidence that yearly mammogram screenings do not reduce the chance that a woman will die of breast cancer and confirms earlier findings that many abnormalities detected by these X-rays would never have proved fatal, even if untreated.

The research, published on Wednesday in the British Medical Journal, is the latest salvo in a decades-long debate over the benefit of mammograms. The 25-year study of 89,835 women in Canada, aged 40 to 59, randomly assigned the volunteers to receive either annual mammograms plus physical breast exams or physical exams alone.

The women started receiving mammograms from 1980 to 1985. At the time, doctors believed screening saved lives by detecting early-stage cancers, which were considered more treatable than cancers detected later, especially in women aged 50 to 64.

Instead, the study "found no reduction in breast cancer mortality from mammography screening," the scientists wrote, "neither in women aged 40-49 at study entry nor in women aged 50-59."

The findings echo research such as a 2012 study in The New England Journal of Medicine which found that screening mammography "is having, at best, only a small effect on the rate of death from breast cancer." On the basis of similar findings going back to the 1990s, the U.S. Preventive Services Task Force, an independent panel of medical experts, in 2009 recommended biennial screening mammography for women 50 to 74 years, replacing an earlier recommendation that women start having mammograms every one to two years at age 40.

Proponents of mammograms often point out that women whose breast cancer is diagnosed by mammography alone live longer than those whose cancer is diagnosed by physical exam. This study found that as well, but the apparent advantage was illusory, the researchers concluded. For one thing, if a cancer is sufficiently aggressive and resistant to treatment it will likely prove fatal no matter when it is detected. Finding it in 2011 by physical exam, as opposed to 2007 by mammogram, simply means that the woman lives longer knowing that she has cancer, not that she lives longer overall.

Mammograms, the study found, increase perceived survival time without affecting the course of the disease.

In addition to not reducing mortality from breast cancer, the study found, mammograms are leading to an epidemic of what the researchers call "over-diagnosis." Nearly 22 percent of the invasive cancers detected by mammography were harmless, meaning they would not cause symptoms or death during a woman's lifetime.

This represents one over-diagnosed breast cancer for every 424 women who received mammography screening, calculate the researchers, who were led by epidemiologist Anthony Miller of the University of Toronto.

He and his colleagues stressed that the results may not hold in countries where access to advanced cancer treatment is limited.

But in countries such as those in North America and Europe where it is, the scientists wrote, "our results support the views of some commentators that the rationale for screening by mammography should be urgently reassessed by policy makers," since annual mammography "does not result in a reduction in breast cancer specific mortality for women aged 40-59 beyond that of physical examination alone or usual care."

An accompanying editorial agrees that policy makers should stop pushing mammograms but points out that this is easier said than done: "governments, research funders, scientists, and medical practitioners may have vested interests in continuing" that push, since mammography is a multi-billion-dollar industry. Annual screenings also give women the sense that they are taking active steps to reduce the chance of dying of breast cancer.

In a statement, the American College of Radiology and Society of Breast Imaging called the BMJ study "an incredibly misleading analysis." The results "should not be used to create breast cancer screening policy as this would place a great many women at increased risk of dying unnecessarily from breast cancer."