Screening

DO FALLING RATES REFLECT LOSS OF CONFIDENCE?

**TRIAL SUMMARY: Compliance with breast cancer screening**


In France, EDIFICE surveys have been conducted since 2005 to understand participation in cancer screening programs. In the breast cancer (BC) screening program, women aged 50 to 74 years are invited to undergo a mammogram every 2 years. This study analyzed participation in screening between 2005 and 2016 according to age, socioprofessional status and social vulnerability. A representative sample of 1,299 subjects aged 50 to 74 years with no history of cancer was contacted by telephone at the end of 2016, and 657 provided information about the date of their last mammogram, along with information on social characteristics.

**Results:** Compliance with BC screening (a mammogram within the past 2 years) decreased significantly between 2014 and 2016 (from 81% to 75%; p=0.02). In 2016, a new and significant decrease in followup rates was recorded among women aged 50 to 54 years (88% in 2014 vs 74% in 2016; p=0.01). Socioprofessional characteristics had no effect on compliance with screening. However, fluctuations have been observed since 2008 among unemployed individuals,
with a significant decline in compliance between 2014 and 2016 (81% vs 73%; \(p=0.03\)). In 2016, social vulnerability was seen to negatively impact on compliance with BC screening (\(p\leq0.01\)), while this had not been the case in 2011 or 2014. There was a significant overall decrease from 2014 to 2016 among both vulnerable (76% vs 65%; \(p=0.04\)) and nonvulnerable populations (85% vs 79%; \(p=0.04\)), highlighting a general loss of confidence.

The year 2016 marks the first time since 2005 that compliance with BC screening dropped significantly in France. A significant overall decline was observed regardless of socio-professional status, and was notable among younger women.

**Commentary:** Breast cancer is the most common malignancy diagnosed in women, with an estimated 26,300 new cases diagnosed in Canada in 2016. The Canadian Task Force for Preventative Health recommends mammography screening for BC every 2 to 3 years for women aged 50 to 74 at average risk. By comparison, in the US, BC recommendations for screening are: to discuss screening with women aged 40 to 44, and perform annual mammography for women aged 45 to 54 and biannually for patients 55 and older.

Mammography is not a perfect screening test for BC. While early detection can result in reduced BC mortality for women aged 50 to 74, it also leads to overdiagnosis — that is, the detection of early-stage BC that would never become clinically significant. There is insufficient evidence for other breast imaging techniques, such as ultrasound, breast magnetic resonance imaging (MRI) and mammogram with tomosynthesis, to use them in BC screening on a population level. Breast self-exam and regular physical exam are also associated with overdiagnosis. As a result, mammography is still the best and most economic screening tool we have for BC screening, imperfect as it is.

The survey conducted by Morere et al provides some interesting insight into trends in mammogram uptake in France over the past 10 years, where participation rates dropped across all patient demographics. The authors conclude that there was an overall loss of confidence in the BC screening process, a troubling trend. This type of research is important to help cancer screening and public health organizations work toward targeting those less likely to participate in mammographic screening. If this trend continues, efforts will be needed to re-engage the population if we are to maintain the benefits gained with early detection. Breast cancer remains the leading cause of cancer death worldwide and early detection and treatment are the best opportunity we have to reduce breast cancer mortality.

**References**


**In Brief**

**Already known**

- Breast cancer screening recommendations vary somewhat between countries.
- Mammography is not a perfect screening test, but is the best available option at present.

**What this study showed**

- In France, compliance with screening dropped significantly, from 81% to 75%, between 2014 and 2016.
- The decrease was seen in both socially vulnerable and nonvulnerable populations.

**Next steps**

- Follow the situation closely and take steps to re-engage the population.