

The breast cancer screening debate: closing a chapter?



Fierce debates about the benefits and harms of breast cancer screening have been played out in pages of *The Lancet*, many other journals, and the mainstream media for a decade or more. Many researchers believe that the benefits of screening, in terms of reduced breast cancer mortality, outweigh the harms (eg, overdiagnosis). Others think the opposite. These polarised discussions are likely to have caused confusion among women about attending for breast screening. In response to this debate, in October, 2011, England's National Cancer Director, Mike Richards, initiated an independent review into breast cancer screening. This assessment is now complete and is summarised in a Review published in *The Lancet*. It should begin to lay the benefits versus harm controversy to rest.

The Independent UK Panel on Breast Cancer Screening led by Professor Sir Michael Marmot reviewed published work (mainly randomised trials) and oral and written evidence presented by experts in the field. They focused on the UK, where women aged 50–70 years have been invited to screening every 3 years through the NHS Breast Cancer Screening Programme since 1988. The Panel found that routine breast screening leads to a 20% relative risk reduction compared with no

screening. This means for every 235 women invited for screening, one breast cancer death will be prevented, representing 43 breast cancer deaths prevented per 10 000 women aged 50 years invited to screening for the next 20 years.

Additionally, the Panel found that some overdiagnosis occurs. 19% of breast cancers diagnosed in women invited for screening would not have caused any problem if left undiagnosed and untreated (a rate of 129 per 10 000 women). However, owing to the scarcity of reliable data in this area, more research is needed to accurately assess the magnitude of overdiagnosis. The Panel also considered how women feel about the available evidence: many women believe the balance of benefits to risks is worthwhile.

The Panel's report, the latest and best available systematic review, shows that the UK breast-screening programme extends lives and that, overall, the benefits outweigh the harms. Dissemination of these findings is now imperative in the media, the NHS screening programme, and between doctors and their patients. Women need to have full and complete access to this latest evidence in order to make an informed choice about breast cancer screening. ■ [The Lancet](#)



Science Photo Library

Published Online
October 30, 2012
[http://dx.doi.org/10.1016/S0140-6736\(12\)61775-9](http://dx.doi.org/10.1016/S0140-6736(12)61775-9)

See Online/Review
[http://dx.doi.org/10.1016/S0140-6736\(12\)61611-0](http://dx.doi.org/10.1016/S0140-6736(12)61611-0)