Breast screening advice updated amid controversy over harms

By James Gallagher Health and science reporter, BBC News

Some experts are concerned about "overdiagnosis"

Women invited for breast cancer screening in the UK are to be given more information about the potential harms of being tested.

An independent review was set up to settle a fierce debate about whether the measure did more harm than good.

It showed that for every life saved, three women had treatment for a cancer which would never have been fatal.

The information will be included on leaflets to give women an "informed choice", the government said.

Cancer charities said women should still take up the offer of screening.

Controversy
Screening has been a fixture in diagnosing breast cancer for more than two decades. Women aged between 50 and 70 are invited to have a mammogram every three years. It helps doctors catch cancer early so treatment can be given when it is more likely to save lives.

Screening in numbers

- More than two million women are screened each year in the UK
- Women between 50 and 70 are screened every three years.
- 48,000 women are diagnosed each year.
- One in eight women will develop breast cancer at some point in their lives.
- More than 11,000 women die from breast cancer each year
However, the national cancer director Prof Sir Mike Richards said it had become "an area of high controversy".

The debate centres around the concept of "over-diagnosis", that is screening which correctly identifies a tumour, but one which would never have caused harm. It leads to women who would have lived full and healthy lives having treatments - such as surgery, hormone therapy, radiotherapy and chemotherapy - which have considerable side-effects.

There is no way of knowing which tumours will be deadly and which could have been left alone.

The review, published in the Lancet medical journal, showed that screening saved 1,307 lives every year in the UK, but led to 3,971 women having unnecessary treatment. From the point of view of a single patient they have a 1% chance of being over-diagnosed if they go for screening.

The independent review panel was led by Prof Michael Marmot, from University College London. He said screening had "contributed to reducing deaths" but also "resulted in some overdiagnosis".

He said it was "vital" women were told about the potential harms and benefits before going for a mammogram.

Cancer charities have unanimously argued that women should still choose to be screened.

Prof Richards said: "My view is that the screening programme should happen, we should invite women to be screened and give women the information to make their own choice."

He said the leaflets on breast cancer screening sent to women would be updated in the "next few months" to "give the facts in a clear, unbiased way".

Current advice does not highlight the scale of the risk.

To screen?
Cancer charities have unanimously argued that women should still choose to be screened.

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The national cancer director described the findings as the "best data" available on the issue. However, this is unlikely to be the final word on breast cancer screening.

One of the lead voices questioning screening, Prof Peter Gotzsche from the University of Copenhagen, has told the BBC he has "serious reservations" about the findings.

His previous research suggested 10 women were treated unnecessarily for every life saved and questioned whether screening had any overall benefit.

He said "the estimate of the balance [of benefit vs harm] is still too positive" in this study.

He criticised the independent panel for using old data and ignoring more recent studies showing no benefit of screening.

He will be publishing a response in a medical journal soon.

A joint statement by Breakthrough Breast Cancer, Breast Cancer Campaign and Breast Cancer Care said: "We encourage all women to attend their screening appointments."

It said the review provided "much-needed clarity" that screening saves lives, but women must be given "clear and balanced information" to highlight the harms.

Cancer Research UK, which commissioned the review alongside the Department of Health, said that "on balance" it thought that women should go ahead with screening.

Its chief executive Dr Harpal Kumar said: "Because we can't yet tell which cancers are harmful and which are not, we cannot predict what will happen in an individual woman's case.

"Research is advancing at pace and we hope that in the future there will be a number of new techniques that we can use alongside the screening programme to make it more sophisticated and reduce the numbers of women having unnecessary treatment."

Richard Winder, the deputy director of the NHS Cancer Screening Programmes, said: "This was a robust review and we appreciate the rigour and efforts of the panel in conducting it.

"We are pleased that the panel concluded the NHS Breast Cancer Screening Programme confers significant benefit and should continue.

"Where they have made recommendations, we will work with all partners to take these forward."

Breast cancer being 'overtreated' - study

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Breast cancer screening for women over 50 saves lives, an independent panel in Britain has concluded, confirming findings in US and other studies.

But that screening comes with a cost: The review found that for every life saved, roughly three other women were overdiagnosed, meaning they were unnecessarily treated for a cancer that would never have threatened their lives.

The expert panel was commissioned by Cancer Research U.K. and Britain's department of health and analyzed evidence from 11 trials in Canada, Sweden, the U.K. and the U.S.

In Britain, mammograms are usually offered to women aged 50 to 70 every three years as part of the state-funded breast cancer screening program.

Scientists said the British program saves about 1,300 women every year from dying of breast cancer while about 4,000 women are overdiagnosed. By that term, experts mean women treated for cancers that grow too slowly to ever put their lives at risk. This is different from another screening problem: false alarms, which occur when suspicious mammograms lead to biopsies and follow-up tests to rule out cancers that were not present. The study did not look at the false alarm rate.

"It's clear that screening saves lives," said Harpal Kumar, chief executive of Cancer Research U.K. "But some cancers will be treated that would never have caused any harm and unfortunately, we can't yet tell which cancers are harmful and which are not."

Researchers estimated that of the more than 300,000 British women aged 50 to 52 offered a mammogram every year, about 1 per cent would get unnecessary treatment like chemotherapy, surgery or radiation for a breast cancer that wouldn't ever be dangerous. The review was published online Tuesday in the journal, Lancet.

Some critics said the review was a step in the right direction.

"Cancer charities and public health authorities have been misleading women for the past two decades by giving too rosy a picture of the benefits," said Karsten Jorgensen, a researcher at the Nordic Cochrane Centre in Copenhagen who has previously published papers on overdiagnosis.

"It's important they have at least acknowledged screening causes substantial harms," he said,
adding that countries should now re-evaluate their own breast cancer programs.

In the U.S., a government-appointed task force of experts recommends women at average risk of cancer get mammograms every two years starting at age 50. But the American Cancer Society and other groups advise women to get annual mammograms starting at age 40.

In recent years, the British breast screening program has been slammed for focusing on the benefits of mammograms and downplaying the risks.

Maggie Wilcox, a breast cancer survivor and member of the expert panel, said the current information on mammograms given to British women was inadequate.

"I went into (screening) blindly without knowing about the possibility of overdiagnosis," said Wilcox, 70, who had a mastectomy several years ago. "I just thought, 'it's good for you, so you do it.'"

Knowing what she knows now about the problem of overtreatment, Wilcox says she still would have chosen to get screened. "But I would have wanted to know enough to make an informed choice for myself."

-AP

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Breast cancer screens leads to 'unnecessary treatment'

By James Gallagher Health and science reporter, BBC News

To screen or not to screen?

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Impact of breast checks queried
Up to one-in-four breast cancers detected by screening would never have gone on to be fatal or cause any symptoms, US researchers say.

Their study based on 39,888 women in Norway said between 15% and 25% of breast cancers were "overdiagnosed".

They said this led to unnecessary treatment such as surgery, chemotherapy or radiotherapy.

In England, the evidence for screening is being reviewed amid controversy about the measure's effectiveness.

Health bodies around the world work on the principle that breast cancer screening saves lives. However, some researchers have argued that it may cause more harm than good.

A review of clinical trials involving a total of 600,000 women concluded it was "not clear whether screening does more good than harm".

Norway investigation
Academics at Harvard School of Public Health looked at nearly 40,000 cases of breast cancer in Norway. They took advantage of a natural experiment to determine the effect of screening as different regions in Norway introduced screening at different times between 1996 and 2005.

The findings, presented in Annals of Internal Medicine, showed 15% and 25% of breast cancers were "overdiagnosed" by screening.

This worked out at preventing one death for every 2,500 women screened, but six to 10 cases of overdiagnosis.

Researcher Dr Mette Kalager said: "Mammography might not be appropriate for use in breast-cancer screening because it cannot distinguish between progressive and non-progressive cancer.

"Radiologists have been trained to find even the smallest of tumours in a bid to detect as many cancers as possible to be able to cure breast cancer.

Breast screening: The UK debate

- 1988: UK women over 50 first offered screening every three years
- 2002: World Health Organization estimates screening reduces deaths by about a third
- Jan 2011: Review of large clinical trials questions whether screening does more good than harm. It says for every 2,000 women screened, one life is saved, 10 women have treatment they don't need and 200 face the stress of false positive results
- Oct 2011: Department of Health says its advice is unchanged and urges all women to go to screening when invited
- Spring/Summer 2012: Expected results of review into breast screening

"However, the present study adds to the increasing body of evidence that this practice has caused a problem for women - diagnosis of breast cancer that wouldn't cause symptoms or
The national cancer director for England, Prof Mike Richards, has announced a review into breast cancer screening.

Dr Julie Sharp, Cancer Research UK's senior science information manager, said: "Cancer Research UK is working with the National Cancer Director on an independent review of breast screening."

"Women need more accurate, evidence-based and clear information to be able to make an informed choice about breast screening. The decision whether to be screened is a personal one and that decision should be made with all of the potential harms and benefits fully explained.

"Until we have the results of the review, Cancer Research UK's position is that we remain supportive of breast screening."

Dr Caitlin Palframan, policy manager at Breakthrough Breast Cancer, said: "The rate of overdiagnosis in breast cancer screening has been debated widely and led to confusing messages for women on the effectiveness of breast screening.

"However, we believe that screening is vital as it helps detect breast cancer early when treatment options are likely to be less aggressive and have more successful outcomes."

A Department of Health spokesman said: "Our screening programme is regularly scrutinised.

"We know that there are some scientists who differ in their views towards screening, so as requested by ministers, the National Cancer Director Professor Sir Mike Richards has commissioned an independent review of the evidence in partnership with Harpal Kumar, chief executive of Cancer Research UK."

The review will publish its findings later this year.