Health

Doubts raised about mammograms

A research group says the mental and physical costs of misdiagnosis are simply too high

Sarah Boseley

Breast cancer screening can no longer be justified because the harm to many women from overdiagnosis and damaging treatment outweighs the small number of lives saved, according to a book that accuses many in the scientific establishment of misguiding their efforts to bury the evidence of critics and keep mammography alive.

Peter Gotzsche, director of the independent Nordic Cochrane Centre in Copenhagen, Denmark, has spent more than 10 years analysing data from the trials of breast screening that were run, mostly in Sweden, before other countries introduced their national programmes.

Mammography Screening: Truth, Lies and Concocting, from Radcliffe Publishing, spells out the findings of the Nordic Cochrane group for laywomen, rather than for scientists.

The data, Gotzsche maintains, does not support mass screening as a preventive measure. Screening does not cut breast cancer deaths by 30%, but saves probably one life for every 2,000 women who go for a mammogram. However, it does increase the number of unnecessary diagnoses of cancer and sometimes - six times in 10 - will lead to a breast operation. Treatment with radiotherapy and drugs, as well as the surgery itself, all have a heavy mental and physical cost.

"I believe the time has come to realise that breast cancer screening programmes can no longer be justified," Gotzsche said. "I recommend women to do nothing apart from attending a doctor if they notice anything themselves."

The book is published as a United Kingdom review of the evidence for breast cancer screening, triggered by Nordio Cochrane's publications in scientific journals, gets under way. In October the cancer care Mike Richards promised an independent investigation of the data.

Richards promised to act on the investigation's findings. "Should the independent review conclude that the balance of harm outweighs the benefits of breast screening, I will have no hesitation in referring the findings to the UK national screening committee and then ministers."

Women in the UK are called for breast screening every three years from the age of 50 and the age range is being extended to encompass all from 47 to 73. The UK health service screening programme has consistently disputed the Nordic Cochrane work.

Last July, in response to a paper that showed no difference in death rates between similar pairs of countries that had introduced or not introduced screening, Professor Juliette Patnick, director of the UK health service cancer screening programme, said: "We can't comment on screening programmes in other countries, but here in England we do know that the best evidence available shows that women aged 50 to 69 who are regularly screened are less likely to die from breast cancer."

Gotzsche's book tells of personal attacks on him and other researchers by the pro-screening lobby, some with financial interests in the continuation of screening, he alleges.

He compares screening advocates to religious believers and argues that their hostile attitudes are harmful to scientific progress. False evidence has been put forward to claim the screening effect is large, he writes. Those who have tried to expose the errors have come under personal attack, as if they were blasphemers.

"I cannot help wonder why many people shrug their shoulders when they learn of scientific misconduct and why many scientists don't care that they deceive their readers repeatedly and betray the confidence society has bestowed on them, whether for a political, gain, fame, for money, for getting research funding or for any other reason."

Some of the screening trials have been biased or badly done, the book says, for instance, by deciding on the cause of death of a woman after researchers knew whether she had been screened for breast cancer or not. The best trials have failed to prove that lives were saved by screening.

Gotzsche's group also found that one in three cancers detected by screening was misdiagnosed. Breast cancer deaths have fallen, he says, but better treatment and better awareness among women, who go to the doctor as soon as they find a lump, are responsible. Half of all breast cancers are found between screenings, he says.

Gotzsche and his group have been highly critical of the leaflet sent to women by the UK health service screening programme that, they say, inflates the benefits and discounts the harms.

Kilm McPherson, professor of public health epidemiology and a critic of the information given to women by the UK health service, says Gotzsche's findings are "of extremely high quality and not to be lightly dismissed."

Gotzsche writes: "The collective denial and misrepresentation of facts about overdiagnosis and the little benefit there is of screening, if any, coupled with the disregard of the principles for informed consent and national laws, may be the biggest ethical scandal ever in healthcare."

"Hundreds of millions of women have been seduced into attending screening without knowing it could harm them." — © Guardian News & Media 2012

Unnecessary Intervention? Women should check their breasts instead of using mammography to reveal cancer. Photo: Jean-Paul Pelissier/Reuters