Breast cancer screening does not save lives, study says

Janice Hopkins Tanne *New York*

Breast cancer screening in "real world" situations is not effective in preventing mortality, says a US case control study. The study, one of the largest completed to date looking at the effectiveness of breast cancer screening, was published in the *Journal of the National Cancer Institute* (2005;97:1035-43).

Randomised controlled studies have shown that breast cancer screening prevents deaths. Many organisations recommend screening by clinical examination and mammography every year or two for women aged 40 or older.

"We observed no appreciable association between breast cancer mortality and screening history, [regardless of age or risk level]," the authors write.

"Our findings may, therefore, reflect a possible reduction in the accuracy of screening as it moves from highly controlled randomised trials to real-life clinical practice."

The study, led by Joann Elmore, professor of medicine at the University of Washington School of Medicine, Seattle, looked at the history of screening in the three years before their diagnosis of cancer in 1351 women who died of breast cancer between 1983 and 1998. They compared these screening rates with those in a control group of 2501 cancer-free women, matched for age (40-49 years or 50-65 years) and risk of developing cancer (average risk or greater risk because of family history or a breast biopsy).

The authors thought that if screening prevents women from dying from breast cancer then the number of women who had been screened would be higher in the cancer-free group. However, screening rates in the two groups did not differ.

Among women aged 40 to 49 and in the average risk group, 66% of women who had cancer

and 64% of women in the control group had been screened. Among women in the same age group but at greater risk, 78% of women who had cancer and 81% of controls had been screened. Among women aged 50 to 65, in the average risk group 70% of women who had cancer and 69% of the controls had been screened, and in the high risk group 81% of women who had cancer and 85% of controls had been screened. None of these differences was significant.

In all the women in the high risk group (in both age groups), breast cancer mortality was a non-significant 26% lower among women who had been screened than among those who hadn't undergone screening. The odds ratio for an association between breast cancer mortality and screening was 0.74 (95% confidence interval 0.53 to 1.03) in the high risk group and 0.96 (0.80 to 1.14) in the average risk group. The difference was not statistically significant ($P=0.17$).

The women were enrolled in six well regarded health plans in Seattle, Boston, Minneapolis, Portland (Oregon), northern

California, and southern California that offered breast cancer screening. About 30% of the women were not white.

The screening was by clinical examination alone, mammography alone, or clinical examination and mammography. Mortality did not differ according to type of screening.

Despite the study's findings, Dr Elmore said that she still recommended screening. "Some people say we should pay more attention to women at high risk, but the majority of women who develop breast cancer don't have risk factors," she said.

In an accompanying editorial Russell Harris of the University of North Carolina, Chapel Hill, said that breast cancer screening in the community may be less effective than in controlled trial situations because of problems implementing programmes.

Women are now more aware of the importance of checking out small lumps, and better treatment may mean that screening is less necessary than previously, because treatment of later stage cancers may still be effective. □

Court rules in favour of GMC's guidance on withholding treatment

Clare Dyer *legal correspondent, BMJ*

The General Medical Council last week won its appeal against a high court judgment that doctors feared could have forced them to provide futile or harmful treatments if patients demanded them.

The judgment, from Mr Justice Munby last July in the case of Leslie Burke, who has the degenerative disease spinocerebellar ataxia, was hailed as a landmark ruling for patients' rights.

Mr Burke had challenged the GMC's guidelines on withholding and withdrawing life prolonging treatments. He feared that when he reached the point where he could no longer communicate his wishes doctors would decide that his quality of life was too poor to continue artificial nutrition and hydration (ANH) and allow him to die of starvation and thirst.

Mr Justice Munby had pronounced the GMC guidance

unlawful in some respects and declared that it would be a breach of human rights to withhold or withdraw ANH from a competent patient who wanted it until his death was imminent and he was comatose. He also ruled that if a competent patient had expressed an informed wish for a particular treatment, it would be in the patient's best interests to receive that treatment.

But three appeal judges, headed by the master of the rolls, Lord Phillips, held that the GMC's guidance was lawful and said the case need never have been brought.

Mr Burke was already protected by the law, they said, and would have discovered this had he sought assurances from the GMC and the doctors caring for him.

Where a competent patient indicated a wish to be kept alive by ANH, "any doctor who deliberately brings that patient's life

Leslie Burke has lost his challenge against GMC guidance

to an end by discontinuing the supply of ANH will not merely be in breach of duty but guilty of murder," said Lord Phillips.

A decision that the life of a competent patient who expressed the wish to remain alive should come to an end was not one that could lawfully be taken.

There was one exception: in the last stage of life ANH might not prolong life but might even hasten death. Whether to provide it was a clinical decision for the doctor, said Lord Phillips, sitting with Lord Justice Waller and Lord Justice Wall.

Ultimately, "a patient cannot

demand that a doctor administer a treatment which the doctor considers is adverse to the patient's clinical needs."

In Mr Burke's case the evidence was that he would remain competent until the final stage of his disease. As long as ANH was prolonging his life he would be able to communicate his wishes with the aid of a computerised device.

In the final stages he would first lose the ability to communicate while remaining sentient and shortly afterwards lapse into a coma. During the final stages ANH would not be capable of prolonging his life.

Lord Phillips called for the GMC's guidance to be "vigorous-ly promulgated, taught, understood, and implemented at every level and in every hospital."

The GMC's president, Graeme Catto, said: "Our guidance makes it clear that patients should never be discriminated against on the grounds of disability.

"And we have always said that causing patients to die from starvation and dehydration is absolutely unacceptable practice and unlawful." □