Deaths from breast cancer fall in Europe

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Improvements in treatment, as well as enhanced access to care, underlie the sustained decreases in breast cancer mortality seen in 30 European countries [1] from 1989 to 2010. But there are notable variations between different countries that cannot be explained simply by the resources devoted to cancer care, and these differences need to be studied further, according to research to be presented to the 9th European Breast Cancer Conference (EBCC-9) tomorrow (Friday).

Professor Philippe Autier, from the International Prevention Research Institute, Lyon, France, told a press conference that, although the decrease in deaths from breast cancer in 2010 was greatest in those countries with the highest mortality rates in the late 1980s, there were notable exceptions. "In 1987-9, rates in Italy, France and Norway were 29.7%, 28% and 27.4% respectively, but the respective declines in mortality rates 22 years later were 26.4%, 15.8%, and 34.5%, and of all European countries, the lowest mortality reductions in women aged less than 50 were also to be found in France," he said. "Given that France devotes substantial resources to cancer care and that Frenchwomen have access to the best treatment, there is something going on here that we don't understand and that needs urgent investigation."

In 1987-9 breast cancer mortality rates were highest in England and Wales at 41.9 per 100,000, and lowest, at 20 per 100,000 in Romania. In 2008-2010 these rates were 25.4 and 22 respectively, indicating that mortality decreased by 40.8% in England, while it increased by 11.4% in Romania.

"There are a number of possible reasons for these variations," Prof Autier will tell the conference. "For example, screening has played an important role in decreasing the average size of tumours at detection. However, trends in the incidence of advanced breast cancer have remained stable, suggesting that screening does not succeed in detecting potentially life-threatening cancers at an earlier stage, and the number of breast cancers that have already metastasised in distant organs when first diagnosed has not decreased. Hence these reductions in size simply represent the increasing incidence of small, early, non life-threatening cancers that are detected by screening and which give an overall impression that things are getting better in terms of outcomes. As a result, we can say that decreased numbers of breast cancer deaths are largely due to improved treatments, not to screening."

Reductions in mortality from breast cancer were greatest in women of less than 50 years of age, with overall reductions of -71.3% to -21.4%, and smallest in women aged 70 and over (from -29.5 to + 81.5), with breast cancer mortality among older women continuing to increase in many countries, particularly those in central and eastern Europe. This can be mainly ascribed to the under-treatment, which is common among older women with breast cancer, the researchers say.

"Our study shows the value of using mortality rates to measure success in controlling cancer. Although survival rates can also be used for this purpose, they tend to cloud the true picture by being influenced by trends in cancer incidence," says Prof Autier. "In countries where there is much screening and thus where many small non-life-threatening breast cancers are found, survival statistics will also be better than in countries where screening is less common, not because of differences in breast cancer mortality, but because of differences in the incidence of small screen-detected cancers.

"However, we still need to figure out precisely why France, which has a

highly organised screening programme, the highest spending on cancer drugs in Europe, and is at the forefront of the use of new treatments, has seen such a modest decrease in breast cancer mortality. Sweden, too, has devoted considerable resources to screening but has shown little change in mortality rates – only 23.7% between 1989 and 2010, while during the same period breast cancer mortality declined by 34.3% in Norway, where nationwide screening was introduced 15 years later than in Sweden. Yet in countries where major screening programmes were implemented after 2000 (e.g. Norway, Belgium, Switzerland, and Austria) we have seen considerable reductions in deaths from breast cancer that are comparable or greater than in countries that implemented screening at the end of the 1980s, for example Sweden, The Netherlands, the UK, and Finland. These are some of the many factors that continue to puzzle us, and we need to put considerable effort into finding out why these differences exist," Prof Autier will say.

New, more effective drugs and the growing availability of multidisciplinary cancer treatments should encourage a further downward trend in deaths from breast cancer. "But there is still a large burden of breast cancer mortality in some of the countries studied, particularly among older women, and reducing that remains a high priority for the future," he will conclude.

Dr Hilary Dobson, chair of EBCC-9's national organising committee and who is Clinical Lead of the West of Scotland Breast Screening Service and the Lead Clinician of the West of Scotland Cancer Advisory Network (WoSCAN), commented: "These findings are an important contribution to the ongoing challenge of understanding which strategies should be implemented to improve survival from breast cancer. Comparison among countries reveals a picture of variation and real complexity when considering factors such as population screening or access to cancer drugs. As no single factor emerges as an answer, continuing scrutiny on this scale and analysis is vital."

More information: [1] Countries studied were: Malta, England and Wales, Iceland, Scotland, Luxembourg, Switzerland, Austria, Norway, Czech Republic, Northern Ireland, The Netherlands, Spain, Ireland, Denmark, Belgium, Germany, Italy, Portugal, Hungary, Sweden, Slovenia, Finland, France, Slovakia, Estonia, Poland, Lithuania, Bulgaria, Greece, Latvia, and Romania.

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