

Breast Cancer Now: supporting cancer prevention

Eluned Hughes

Head of Public Health and Information



United in 2015 to form the UK's largest breast cancer charity, dedicated to funding research



Our approach

We bring together everyone affected by the disease and all those working to stop it:

- Supporting nearly 400 of the UK and Ireland's brightest researchers
- Public health campaigns that reach millions
- Hard-hitting policy work and campaigning on behalf of patients and their families
- Incredible fundraisers make sure our work can continue

Risk and prevention



Risk and prevention

The Breast Cancer Now Generations Study

- Over 113,000 women
- 40 year study
- Launched in 2004
- Searching for genetic, environmental and lifestyle causes



“

Being part of the Generations Study means I'm helping Breast Cancer Now find new ways of understanding and preventing the disease. Having watched my beautiful daughter Becs lose her life to this disease, I'm determined to do all I can to stop breast cancer.

”

Amanda Jones,
Breast Cancer Now supporter

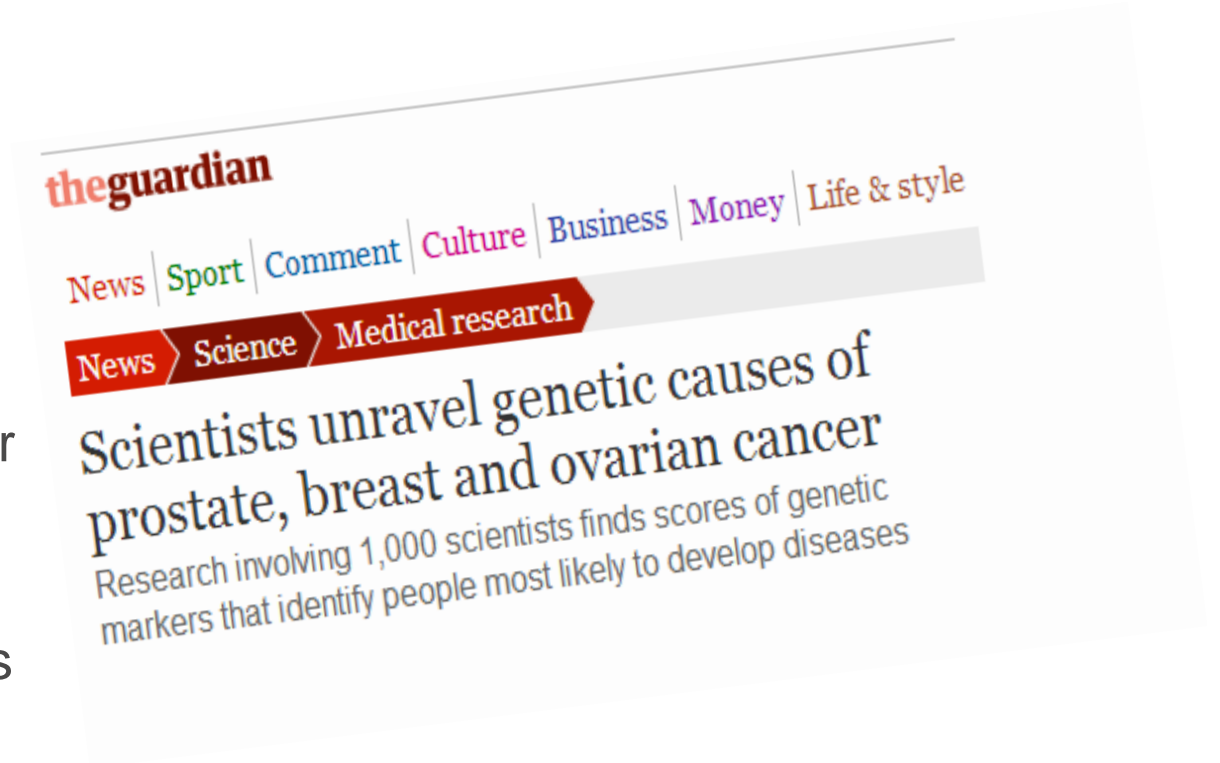
breast cancer
now

Risk and prevention

The Breast Cancer Now Generations Study

Achievements so far

- **Over 90** genetic markers found
- Found direct links between hormone levels and breast cancer risk
- Recent results on HRT and stress
- Years of discoveries to come!



Health information

Risk booklet + factsheets

breast cancer now

Raise your pulse, reduce your risk
How regular physical activity can reduce your breast cancer risk

Quick facts

- 30 minutes of daily physical activity can reduce your risk of breast cancer by at least 20%.
- Any moderate activity counts (like making you warmer and breathe harder and raises your heart beat faster)



breast cancer now

Alcohol and breast cancer risk
How much does drinking alcohol affect your risk?

Quick facts

- Regularly drinking alcohol (even one drink a day) increases your risk of developing breast cancer.
- The more you drink, the greater your risk.
- Limit the amount of alcohol you regularly drink throughout your life to reduce your risk of breast cancer.



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Breast cancer risk
The facts

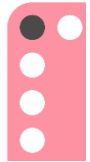


breast cancer now

The pill and breast cancer risk
How does taking the oral contraceptive pill affect your chances of developing breast cancer?

Quick facts

- The combined contraceptive pill slightly increases your risk of breast cancer.
- Ten years after stopping the combined pill, this small increase in risk disappears.
- We do not yet know whether the oral pill and other hormone-based contraceptives affect breast cancer risk in the same way.



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Weight and breast cancer risk
How much does your weight affect your risk?

Quick facts

- Most cases of breast cancer occur in women who have been through the menopause.
- By maintaining a healthy weight throughout your life, you can reduce your risk of developing breast cancer after the menopause.
- The more weight you gain throughout your life, the higher your risk of developing breast cancer after the menopause.



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Hormone replacement therapy (HRT) and breast cancer risk
How does taking HRT affect your chances of developing breast cancer?

Quick facts

- Taking HRT to treat menopausal symptoms increases your risk of breast cancer.
- This risk increases the longer you use HRT.
- Breast cancer risk is greater with combined HRT than with oestrogen-only HRT.
- Within five years of stopping HRT, this increase in risk disappears.



Brisk

Raise your pulse, reduce your risk

breast cancer now

Brisk

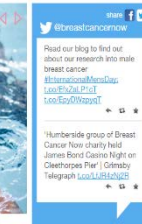
Understanding breast cancer risk

HOME YOUR TRACKER ACTIVITY SUGGESTIONS THE FACTS LOGIN / REGISTER



If every woman in the UK was physically active, 1 in 6 cases of breast cancer could be avoided

Get inspiration from others...



How active are you?



30 minutes of daily physical activity (or 3.5 hours a week) can reduce your risk of breast cancer by at least 20%

Any moderate physical activity counts – that's activity that gets you warmer and breathing harder and your heart beating faster.

Start tracking your activity today

Get inspired

If every woman in the UK was physically active, 1 in 6 cases of breast cancer could be avoided.



Get activity ideas

What other women are

Family history guide

breast cancer now

Family history of breast cancer
Managing your risk

Home Family history Your risk Managing risk Women's stories Support for you About us



Exploring family history
I think I may have a family history and want to find out more...



Assessing your risk
How will specialists estimate my chance of developing breast cancer and will this include genetic testing?



Taking action
I have a confirmed family history and want to know about services to manage and reduce my risk...

Introduction

Most women in the UK have a one in eight chance of developing breast cancer in their lifetime. However, if you have a family history of breast cancer, you and some other members of your family may have a higher than average risk of developing the disease. NHS services are available to help women and men in this situation. Specialists are able to assess whether you are at increased risk and offer advice and support. If you do have an increased risk of developing breast cancer, there are options available to help reduce this risk and make sure the disease is spotted early if it does occur.



Emily's story
Watch Emily's story on finding out her family history of breast cancer.

Support and information

- ▶ Talking to relatives
- ▶ Getting support
- ▶ Patient's stories

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REVIEW

Risk determination and prevention of breast cancer

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Abstract

Breast cancer is an increasing public health problem. Substantial advances have been made in the treatment of breast cancer, but the introduction of methods to predict women at elevated risk and prevent the disease has been less successful. Here, we summarize recent data on newer approaches to risk prediction, available approaches to prevention, how new approaches may be made, and the difficult problem of using what we already know to prevent breast cancer in populations. During 2012, the Breast Cancer Campaign facilitated a series of workshops, each covering a speciality area of breast cancer to identify gaps in our knowledge. The risk-and-prevention panel involved in this exercise was asked to expand and update its report and review recent relevant peer-reviewed literature. The enlarged position paper presented here highlights the key gaps in risk-and-prevention research that were identified, together with recommendations for action. The panel estimated from the relevant literature that potentially 50% of breast cancer could be prevented in the subgroup of women at high and moderate risk of breast cancer by using current chemoprevention (tamoxifen, raloxifene, exemestane, and anastrozole) and that, in all women, lifestyle measures, including weight control, exercise, and moderating alcohol intake, could reduce breast cancer risk by about 30%. Risk may be estimated by standard models potentially with the addition of, for example, mammographic density and appropriate single-nucleotide polymorphisms. This review expands on four areas: (a) the prediction of breast cancer risk, (b) the evidence for the effectiveness of preventive therapy and lifestyle approaches to prevention, (c) how understanding the biology of the breast may lead to new targets for prevention, and (d) a summary of published guidelines for preventive approaches and measures required for their implementation. We hope that efforts to fill these and other gaps will lead to considerable advances in our efforts to predict risk and prevent breast cancer over the next 10 years.

Introduction

Breast cancer remains a major public health problem. The incidence is rising in most countries and is projected to rise further over the next 20 years despite current efforts to prevent the disease [1-4]. The increased incidence is not surprising since there has been, in most countries, an increase in numbers of women with major breast cancer risk factors, including lower age of menarche, late age of first pregnancy, fewer pregnancies, shorter or no periods of breastfeeding, and a later menopause. Other risk factors which add to the burden of breast cancer are the increase

in obesity, alcohol consumption, inactivity, and hormone replacement therapy (HRT) [4]. The impact of hereditary breast cancer has also increased. For example, it is estimated that the penetrance of the breast cancer 2 (*BRCA2*) founder mutation in Iceland increased fourfold over the last century, and the cumulative incidence of sporadic breast cancer by age 70 also increased fourfold, from 2.5% to 11% of the population, over the same period [5]. Birth cohort effects have also been seen for both *BRCA1* and *BRCA2* in other countries [6,7]. These data suggest that both familial and non-familial risks have increased. The Collaborative Group on Hormonal Factors in Breast Cancer (2002) estimated that the cumulative incidence of breast cancer in developed countries would be reduced by more than half, from 6.3 to 2.7 per 100 women, by age 70 if women had on average more children and breastfed for

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**By 2050,
we believe
everyone
who gets
breast cancer
will live.
But only
if we all
act now.**

breast cancer
now

breast cancer
now



**What we
will achieve,
together**

**Reduce number
of cases of
breast cancer**

**Empower women
to make healthy
changes**

**Understand
and implement
interventions that
work**

**Happier, healthier
M&S employees**

M&S and Breast Cancer Now

I'M DOING DRY JANUARY FOR BREAST CANCER NOW



Helping women
to cut down
on alcohol and
reduce their risk
of breast cancer.

breast cancer
now

“ WE KNOW THAT REGULARLY
DRINKING ALCOHOL INCREASES YOUR
RISK OF BREAST CANCER. TAKING
PART IN DRY JANUARY IS A SIMPLE
FIRST STEP TO MAKING A POSITIVE
HEALTH CHANGE FOR 2018.

Baroness Delyth Morgan, CEO, Breast Cancer Now

breast cancer
now



University
of Dundee



THE UNIVERSITY
of EDINBURGH



UNIVERSITY
OF ABERDEEN



University
of Glasgow



UNIVERSITY OF
STIRLING

ActWELL

NHS
SCOTLAND

breast cancer
now



**The Scottish
Government**
Riaghaltas na h-Alba

ActWELL Lifestyle Coaches



What's next for Breast Cancer Now?

- ♥ Influencing adoption of risk stratification models into NHS
- ♥ Commissioned research - prevention
- ♥ Increased investment into Public Health and Information
- ♥ Public health prevention campaigns and interventions
- ♥ Volunteering opportunities
- ♥ Roll out of ActWELL?