

Do women know that the risk of breast cancer increases with age?

Kath Moser, Julietta Patnick and Valerie Beral

ABSTRACT

It is important that women know that the risk of breast cancer increases with age. Women's knowledge of the increased risk will help to inform their health-seeking behaviour. This study shows that over 50% of women wrongly believe that the risk does not vary with age. Only 1% are correctly informed, believing that the oldest group of women are at the greatest risk of breast cancer. Those working in primary care need to be aware of this lack of knowledge when patients consult.

Keywords

age; breast cancer; knowledge.

INTRODUCTION

In 2002 42 000 cancer registrations in the UK were attributed to breast cancer.¹ Aside from being female, the most important risk factor for breast cancer is increasing age. In 1988, shortly before the start of the NHS Breast Screening Programme (NHSBSP), the breast cancer annual registration rate per 1000 women in England was 0.4, 1.2, 1.9, 2.3, 2.7 and 3.3 for women in their 30s, 40s, 50s, 60s, 70s and those aged ≥ 80 years, respectively. Since then, despite increased breast cancer detection in the age groups screened, this broad age pattern still persists (0.5, 1.5, 2.9, 3.4, 3.3, 3.9 in women in their 30s to those aged 80 years and over, respectively [2003 rates]).² It is important that women are aware that the risk of breast cancer increases with age. Women's knowledge of this increased risk will help to inform their health-seeking behaviour. The NHSBSP commissioned the collection of survey data to investigate whether women know that the risk of breast cancer increases with age.

METHOD

This study uses data from the National Statistics Omnibus Survey, a multipurpose monthly survey based on a representative sample of adults in Great Britain.³ The NHSBSP module was given to women aged 40–74 years in four months during 2005. It included the question:

'When is a woman most likely to get breast cancer ... when she is in her 40s ... when she is in her 50s ... when she is in her 60s ... when she is in her 70s ... when she is in her 80s or older, or ... age doesn't matter?'

The data from the four surveys, giving responses from 1496 women in total, were combined for analysis. Analysis was performed using Stata Version 9.0. Weighting factors were used to compensate for non-response bias and to correct for the unequal probability of selection resulting from interviewing only one adult per household. The analysis took into account the cluster design of the sample.

RESULTS

When asked 'When is a woman most likely to get

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Table 1. Women's knowledge of how breast cancer risk varies by age: overall and by age of responder.

	<i>n</i>	Responses to the question: When is a woman most likely to get breast cancer? % (95% CI)							
		In her 40s	In her 50s	In her 60s	In her 70s	In her 80s +	Age specified ^a	Age doesn't matter	Don't know
All women	1496	9.3 (7.7 to 11.2)	21.3 (18.6 to 24.3)	6.9 (5.4 to 8.8)	1.3 (0.8 to 2.2)	0.7 (0.3 to 1.6)	39.5 (35.9 to 43.3)	56.2 (52.4 to 59.9)	4.3 (3.4 to 5.5)
Age of responder									
40–49	495	7.3	25.9	6.3	1.0	0.8	41.3	55.4	3.3
50–59	443	9.7	22.1	7.0	0.9	1.2	40.9	55.9	3.2
60–69	371	8.4	16.1	8.6	1.9	0.3	35.2	59.5	5.3
70–74	187	16.5	15.0	5.4	2.4	0.0	39.3	52.2	8.5

^aTotal percentage of women saying 'in her 40s' 'in her 50s' 'in her 60s' 'in her 70s' or 'in her 80s+'

breast cancer?' 56% of responders said 'age doesn't matter', while 21% said 'in her 50s' and 9% said 'in her 40s' (Table 1). Less than 1% indicated that women were most at risk when aged 80 years or older. The findings are similar for each age group of responder; in each age group, over 50% said that 'age doesn't matter' and a further 25% or more indicated that women are most at risk in their 40s or 50s.

A significantly smaller percentage of degree-educated women, and women in managerial and professional occupations, indicated that age does not matter than less well-educated women and those in routine and manual occupations respectively (Table 2). Of responders who specified an age group, in all sub-groups (regardless of socioeconomic characteristic) and including the higher socioeconomic groups, the largest percentage indicated that women are most at risk of breast cancer in their 50s. Very few responders of any socioeconomic group said women in their 70s or those aged 80 years and over are most at risk.

DISCUSSION

This study, based on a representative sample of the population of Great Britain, indicates a serious lack of knowledge about the age pattern of breast cancer risk. Only 1% of women interviewed were correctly informed, believing that the oldest group of women are most at risk of having breast cancer. Over 50% of women wrongly believe that the risk does not vary with age. There is no indication that any particular sociodemographic subgroup is well informed.

Contributing to this lack of knowledge may be the media focus on young high profile women with breast cancer, as well as the likelihood that women interpret the age range 50–70 years for routine breast screening as indicating the risk among older women to be small. Whatever the reason, it is clearly important that this lack of knowledge is

addressed. Older women, in particular, need to know to seek advice promptly with symptoms. Delayed presentation of symptomatic breast cancer is associated with being diagnosed with later stage disease and poorer survival.⁴ Older women, despite being at greater risk of developing breast cancer and having a greater likelihood that a breast symptom is breast cancer,⁵ are more likely to delay than younger women.⁶ They perceive themselves at less personal risk of developing breast cancer than younger women and are particularly poor at identifying symptoms of and risk factors for breast cancer.^{7,8} Women also need to understand the importance of continuing to accept invitations for breast screening as they get older,⁹ and those over the age of 70 years should be informed of their continued entitlement to request screening.

Those working in primary care need to be aware that most women do not know that breast cancer risk increases with age. They are ideally placed to encourage women to continue attending for screening, and to have a more realistic understanding of their risk according to their age.

How this fits in

It is important that women know that the main risk factor for breast cancer is increasing age. Women's knowledge of this increased risk will help to inform their health-seeking behaviour. This study finds there to be a serious lack of knowledge. It shows that over 50% of women wrongly believe that breast cancer risk does not vary with age, while only one in 100 correctly believe that the oldest group of women are at greatest risk. Those working in primary care need to be aware of this poor knowledge, which spans all sociodemographic groups, when patients consult.

Table 2. Women's knowledge of how breast cancer risk varies by age: by socioeconomic characteristics.

	n	Responses to the question: When is a woman most likely to get breast cancer? % (95% CI)					Age specified ^a	Age doesn't matter	Don't know
		In her 40s	In her 50s	In her 60s	In her 70s	In her 80s +			
Cars available to household									
0	315	9.0	14.4	6.1	1.0	0.3	30.8	63.4 (56.4 to 69.8)	5.9
1	712	10.7	18.4	7.3	1.6	0.7	38.7	56.3 (51.5 to 61.0)	5.0
≥2	469	7.8	27.3	6.9	1.2	0.8	44.0	53.1 (47.4 to 58.7)	2.9
Housing tenure ^b									
Rents	303	11.8	12.9	5.1	1.5	0.3	31.5	61.6 (54.9 to 67.9)	6.9
Owns with mortgage	557	7.7	26.6	6.5	0.8	1.0	42.7	55.7 (50.2 to 60.9)	1.7
Owns outright	635	9.7	19.5	8.1	1.8	0.6	39.7	54.5 (49.5 to 59.5)	5.7
Highest level of education ^b									
No qualifications	556	12.1	16.1	5.3	1.2	0.2	34.8	60.2 (54.6 to 65.6)	5.0
Below degree level (including other)	712	7.8	22.1	6.6	0.8	0.1	37.4	58.4 (53.5 to 63.1)	4.2
Degree or equivalent	227	7.8	30.6	11.7	3.5	3.9	57.5	39.5 (32.4 to 47.2)	3.0
National Statistics Socioeconomic Classification									
Routine and manual occupations	598	11.2	17.7	4.8	0.6	0.0	34.3	61.3 (56.3 to 66.1)	4.4
Intermediate occupations	353	9.5	18.1	8.8	1.0	0.8	38.2	57.0 (51.1 to 62.7)	4.8
Managerial and professional occupations	497	7.1	27.7	8.0	2.5	1.5	46.8	49.4 (43.9 to 54.9)	3.8
Not classified	48	6.9	22.1	7.9	0.0	0.0	36.9	59.0 (42.4 to 73.7)	4.1

^aTotal percentage of women saying 'in her 40s' 'in her 50s' 'in her 60s' 'in her 70s' or 'in her 80s+'. ^bTotals do not sum to 1496 because of missing values.

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Ethics committee

Not applicable

Competing interests

Julietta Patnick is the Director of the NHSBSP, and Valerie Beral is the Chairman of the Advisory Committee on Breast Cancer Screening

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