

“No respecter of youth”: over-representation of young women
in Australian television coverage of breast cancer.

Running title: Australian television coverage of breast cancer and screening

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Abstract

Background:

Ninety four percent of new breast cancer cases in Australian women occur in those aged over 40. Mammographic breast screening programs target women over 40, especially those aged 50-69, but participation rates in this age group have recently declined.

Methods: To test the hypothesis that young women, at low risk for breast cancer, are overrepresented in television news, we analyzed all televised news reports on age and breast cancer shown on 5 free-to-air Sydney television stations, 3 May 2005 to 28 February 2007 to determine the age of women shown with, or at risk for, the disease.

Results: Over half (55%) of statements about age and breast cancer referred to young women stated or known to be aged under 40. 67% of images of women in breast cancer reports were known or judged to be women aged under 40. Three cases in young celebrity women accounted for 53% of all statements and 24% of all images about young women and breast cancer.

Conclusions:

Overrepresentation of young women with breast cancer in television news coverage does not reflect the epidemiology of the disease. This imbalance may contribute to public uncertainty regarding screening policy.

Introduction

Mammogram screening is widely recognized as the most effective means of early detection of breast cancer, the most common cancer and leading cause of cancer-related death among Australian women.¹ The Cancer Council Australia recommends that women aged 50-69 have a mammogram every two years, but is less precise on other age categories citing the increasing debate “around the benefit of extending screening to women in the decades either side of this age bracket”.² Since 1991, free screening has been available via a government initiative targeting women aged 50-69 who are invited to attend screening every two years. The service is available to women aged 40-49 and to those over 70 years, although not actively promoted to them.³ Women under 40 can obtain mammograms through private providers, but data are unavailable on this group.

Despite widespread education campaigns, public⁴ and scientific⁵ uncertainty remains regarding the likelihood of developing breast cancer, recommended age range for screening, and associated risk factors. Certainly, screening remains underutilized; the 2004-2005 participation rate among women aged 50-69 was 56.2%, well below the target of 70%.⁶ By comparison, English National Health Service figures indicate that at March 2005, 75.5% of women aged 53-64 had been screened at least once in the previous three years.⁷

Breast cancer has a high news media profile,⁸ and its incidence and mortality rates are over-reported.^{9,10,11} Such ambiguous depiction^{4,12} implicates the media in public confusion about screening.¹³ Print media and websites, for example, overstate the benefits of mammography,¹⁴

the extent to which younger women are at risk, while understating the risk to older women.¹² Other studies have identified an emphasis on fear of diagnosis,¹⁵ and a focus on celebrity diagnoses and treatment.^{9,16,17} Similarly, cancer control agency material, in the zeal to promote screening, frequently omits crucial information required to make informed decisions¹⁸ and is biased in favor of screening.¹⁹ Given these mixed media messages, it is unsurprising that a recent report found 66.7% of women in the US incorrectly named breast cancer as the leading cause of cancer-related death among women, apparently unaware that lung cancer is responsible for the greatest number of deaths.²⁰

This study is the first to examine coverage of breast screening on television, the primary source of news, information and entertainment for most Australians.²¹ We hypothesized that young women (i.e. under 40) who are at low risk of breast cancer relative to older women, would be over-represented in news coverage.

Methods

As part of a broader study of health issues on television, all news, current affairs, and "infotainment" programs concerned with health or medicine on all 5 free-to-air (i.e. non-subscription) Sydney television channels have been recorded since May 2005.²² Over 17,000 items are currently stored. Analysis of all reports about breast cancer (n=341) broadcast between 3 May 2005 and 28 February 2007 for explicit and implicit statements about age and breast cancer yielded 421 examples. *Explicit* statements stated age while *implicit* references to age primarily pertained to three celebrity diagnoses in young women, where age was not mentioned but because of their profile, was well-known.

Based on the predominant focus of the news item in which they appeared, these statements were categorized under six headings derived inductively from the analysis (see Box 1).

Box 1

Celebrity cases: statements relating to three celebrities with breast cancer, each of whom were in their 30s. Singer Kylie Minogue's diagnosis, in particular, received extensive coverage.

Scientific progress and treatments: statements on research and availability and government funding of drugs like Trastuzumab (Herceptin), and new testing methods.

Screening policy/early detection / age focus: statements regarding screening policy and age-related issues; calls for screening criteria to be broadened; examples of young women denied screening.

Awareness and fund raising initiatives: statements about breast cancer awareness campaigns, including fund raising.

Causes: coverage of risk factors and putative causes of breast cancer.

Cancer clusters: statements about a cancer cluster at a radio/TV station.

In addition, all images of women (n = 483) in these reports who had breast cancer, were shown having mammograms, or portrayed as representative of women at risk of breast cancer were assessed for age. Images were categorized into three groups: women stated, known to be or judged as appearing to be under 40 years; those stated, known or judged to be over 40 years; and those of indeterminate age (typically, face not shown with a back view of a woman having a mammogram).

When a single news report contained several such images, all were analyzed. To test author RM's assessment of the age of the 85 women for whom no age was given or known, 23 such film clips were randomly selected and shown to 6 other coders who categorised the age category to be under 40; over 40; or indeterminate. A kappa statistic for inter-coder reliability was calculated.

Results

Table 1 shows the distribution of statements about age across the six focal areas.

Table I : Statement references about age of women group/report frame.

Principal frame of statement	Number of statements	Statements on threat of breast cancer or screening policy by frame / age group specified			
		<40	40≥	Not specified	Advice for women under 40 / rationale for screening policy?
Celebrity cases	126	122 (97%)	4 (3%)	0	0
Screening policy	111	66 (60%)	25 (22%)	5 (4.5%)	15 (13.5%)
Scientific progress/ treatment	108	19 (18%)	26 (24%)	63 (58%)	0
Awareness/ fund-raising	43	13 (31%)	1 (2%)	10 (23%)	19 (44%)
Causes	18	0	14 (78%)	2 (11%)	2 (11%)
Cancer clusters	15	10 (67%)	0	5 (33%)	0
Total	421	230 (55%)	70 (17%)	85 (20%)	36 (8%)

Celebrity cases

Previous analysis of the intense media coverage surrounding singer Kylie Minogue’s breast cancer diagnosis in 2005 demonstrated an association between news reportage and a rise in the number of bookings for mammograms by women over 40.¹⁶ Two other celebrity cases attracted considerable media attention: the death of Australian actor Belinda Emmett, diagnosed with breast cancer at the age of 24 and the progress of Jane McGrath, wife of a prominent Australian cricketer who had been diagnosed with breast cancer at age 31. With over a quarter of *all* breast cancer reports focusing on young celebrity cases, a dominant message was conveyed that breast cancer could “strike at any age” (Channel 9 News 18 May 2005), implicitly repudiating age-restricted screening promotion policy.

Screening policy

All reports pertaining to screening policy either explicitly or implicitly alluded to age. There was considerable overlap between reports in this category and coverage of celebrity illness, primarily because celebrity cases often triggered news items about screening policy. Reports frequently emphasized the contrast between susceptibility to breast cancer, described as “no respecter of youth” (ABC 7:30 Report 17 May 2005), and existing screening policy which was often framed as being dangerously discriminatory against women under 50. Kylie Minogue’s diagnosis was described, for example, as having “really sounded the alarm once again about the importance of breast screening. But strange as it seems, getting that regular check up isn't that easy for women in Kylie's age group” (Channel 9 News 18 May 2005).

By focusing on diagnoses in younger women, the implication was that commonsense repudiated age specific screening policy, and meant that “women in thirties or forties who need regular check-ups are forced to have private tests” which they would “struggle to afford”(Channel 7 News 18 May 2006). In one report, a high profile clinician described the policy as effectively “sending women away who do have a reasonable risk of breast cancer, particularly when they’re aged 45 to 49” (Channel 9 News 18 May 2005).

Coverage also included women whose symptoms had caused them to seek medical advice, only to have their concerns discounted by either a doctor or a testing facility. A 33 year-old woman who had found a lump “struggled to find anyone who believed it was serious” to the point that “a radiologist even refused to do tests despite a GP’s referral” (Channel 7 News 1 Jun 2005). A

report of two sisters who, despite a family history of breast cancer, were reportedly “too young to qualify” for screening (Channel 9 News 22 May 2005) stating they “would like to see everyone, no matter what age they are, have a mammogram for free” and that it was “scary to think we could get it (cancer) or our daughters could get it”.

Only 15 statements (13.5%) in this category sought to either explain that the risks of screening may outweigh the benefits of testing for younger women, or provided information on alternatives to mammography.

Scientific progress and treatments

This category was dominated by debate over accessibility and government funding of Herceptin, used in treatment of HER2 breast cancer.²³ Previous analysis of Australian television news on Herceptin noted that the relatively young age of sufferers was frequently emphasized, and that just under 25% of these reports included a visual or textual reference to mammography testing.²⁴

Awareness and fund-raising initiatives

The 43 statements in this category described campaigns aimed at fund-raising (20 or 46%), or improving public awareness of key issues surrounding breast cancer. Of the remaining statements, 5 pertained to a 2005 survey which revealed unexpectedly low levels of awareness among women on basic issues of breast cancer detection including symptoms and the importance of reporting these.²⁵

Causes

Fourteen statements about putative causes of breast cancer referred to age, all specifically to women over 40 years of age. The remainder focused on lifestyle issues including diet and alcohol consumption.

Cancer cluster incident

Between 1995 and July 2007,[†] 15 women who had worked at broadcasting studios in Brisbane were diagnosed with breast cancer.²⁶ Reports focused on the rising number of cases, and the decision to abandon the facility in December 2006, following findings that the risk of breast cancer was 11 times higher for those working in the building than in the general population.

The age of those involved was frequently emphasized (“the majority of us are in our thirties, which is very rare. It’s a 1 in 11 chance for Australian women, all Australian women, to get breast cancer, but when you’re in your thirties, it’s about a 1 in 240 odd chance” Channel 7 Sunrise 17 Jun 2006). One woman explained that having called a local hospital and “begged them for a mammogram” she was advised that she was too young, too fit and healthy, not in a high risk range and did not need the procedure, and was forced to “really convince my doctor to give me a referral and I went in and found I had breast cancer.”²⁷

Images

Table 2 shows the age of women featured in images included in reports. The Kappa intercoder agreement of 0.59 falls well within what Fleiss described as fair to good agreement (0.4 to 0.75)²⁸ and may have been higher, had the random sample selected not included back view shots of women having mammograms where discordant coding was highest.

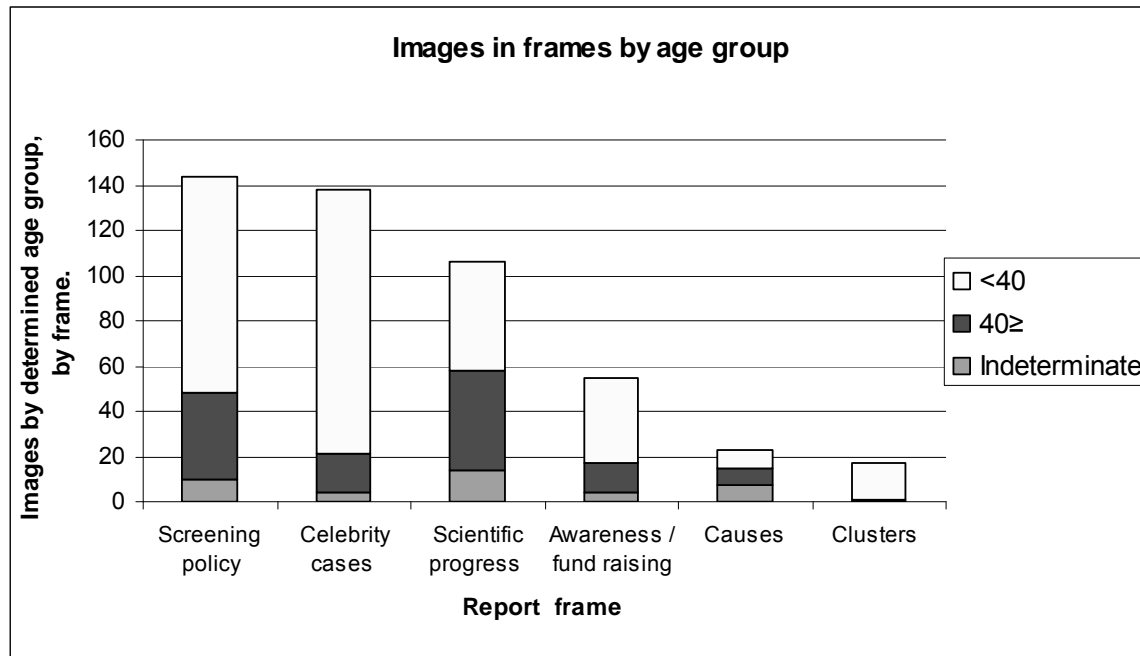
[†] The cancer cluster investigation is an ongoing news story, but only those reports broadcast up until 28 February 2007 were included in this analysis.

Table II: Images of women by age group/report frame.

Frame of report	No. of images	Images of women featured in report by age group; and percentage by frame		
		<40	40≥	Indeterminate*
Screening policy	144	96 (67%)	38 (26%)	10 (7%)
Celebrity cases	138	117 (85%)	17 (12%)	4 (3%)
Scientific progress / treatment	106	48 (45%)	44 (42%)	14 (13%)
Awareness / fund raising	55	38 (69%)	13 (24%)	4 (7%)
Causes	23	8 (35%)	8 (35%)	7 (30%)
Cancer clusters	17	16 (94%)	1 (6%)	0 (0%)
Total	483	323 (67%)	121 (25%)	39 (8%)

Sixty seven percent of women depicted were known or judged to be under 40 years; and 117/483 (24.2%) were images of the three young celebrities. After removing these celebrity reports, images of women under 40 still accounted for 42% of all images used, with 96/144 (67%) of those shown during reports on screening policy portraying women under 40. The proportion of images classified as aged under 40 was significantly different across the frames of the reports ($p < 0.001$), whether celebrity cases were included or not.

Chart 1: Age groups of women in images in reports



Discussion

Television reports of breast cancer on Australian television during the period of analysis would have done little to address public uncertainty as to who should seek screening, or to clarify the rationale for existing policy regarding women aged 40-49 years.³

Only 36 statements on age and breast cancer (8.6%) provided explanations or supportive evidence of current screening policy, or provided advice on available alternatives. The majority of news items obfuscated these issues, or were more often explicitly critical of “younger” women not having free access to mammograms. Media focus on celebrity health issues can have positive effects on public awareness of health issues, but the “tabloid values”¹⁵ that underlie fascination with celebrity illness can also have marked detrimental effects.²⁹ Publicity surrounding the

Minogue diagnosis, for example, was also associated with increased demand for mammograms in younger women, who are at much lower risk.¹⁷

Diagnoses of breast cancer among women under 40 accounts for slightly more than 6% of new cases in Australia, but this does not diminish its seriousness for those individuals, particularly as breast cancer may be more aggressive in younger women.³⁰ Those responsible for communicating the epidemiological basis for confining mammographic screening to women over 40 (and particularly to women aged 50-69) need to anticipate how to assuage lay skepticism about the wisdom of such recommendations generated by widespread coverage of breast cancer in young women. Similarly, key risk factors for breast cancer (ageing, family history, alcohol consumption, obesity, physical inactivity use of hormone replacement therapy)³¹ were rarely reported.

This focus on younger women in news reports of breast cancer may be an important contributory factor in recent declining mammography participation rates in the 50-69 year-old age range in Australia. Certainly, current debate surrounding the efficacy of screening itself³² could reasonably be assumed to be an important influence on women's attitudes to attending mammography screening. While this debate has attracted media interest in the United States,^{33,34} we found no coverage of it on Australian television during the period of analysis. The central point of contention as described by Australian television was *when* to be screened, as opposed to *whether* to be screened, despite consistent efforts by a number of experts to emphasize the optimal age for screening.

Breast cancer attracts high levels of media attention in Australia, and representatives of advocacy agencies are regularly featured on television news. Such unpaid media coverage presents real opportunity to gain “‘free’ publicity in contrast to paid campaigns”,³⁵ but in the determination of breast cancer advocacy groups to promote screening for women in the target age group, it is possible that responsibilities to communicate the important reasons that screening is not advised for young women are being neglected.

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