Breast cancer in women over 70 “Be Clear on Cancer” awareness – What impact did it have on urgent GP referrals for suspected cancer?

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INTRODUCTION

In February to March 2014, a national “Be Clear on Cancer” awareness campaign ran to highlight the continuing risk of breast cancer in women over 70. The campaign aimed to raise public awareness of cancer symptoms and encourage those with symptoms to see their GP, supporting initiatives to diagnose cancer earlier and improve survival.

This campaign differed from other Be Clear on Cancer campaigns in that it highlighted the continuing risk of cancer, rather than specific symptoms alone (Figure 1). Additionally, with consideration of the older target age group, it also ran with a more daytime focus than other campaigns.

The evaluation of this campaign considers the impact on urgent GP referrals for suspected cancer (Two Week Wait – 2ww): Did the number of 2ww referrals increase? How did diagnoses following a 2ww referral change?

METHODS

The Cancer Waiting Time Database (CWT-Db) contains information on patients urgently referred for suspected cancer and on patients diagnosed with breast cancer (ICD10: C50, D05). Data were extracted from the CWT-Db for January 2012 onwards. Analysis considered trends in the number of 2ww referrals, over time and by age, for women under 70 and women aged 70 and over.

It also considered changes to metrics relating diagnoses to 2ww referrals:
• the number of 2ww referrals resulting in a diagnosis of cancer (2ww cancers)
• the percentage of 2ww referrals resulting in a diagnosis of cancer (conversion rate)
• the number of CWT recorded cancers (CWT cancers)
• the percentage of CWT recorded cancers which resulted from a 2ww referral (Prevalence rate)

Analysis identified where any changes, in comparison to the same months in the 2012, were statistically significant. Comparison was not made with 2013 due to the impact of the regional pilot campaign in the Midlands in January to March 2013. A likelihood ratio test based on the Poisson distribution was used for percentage changes in the number of 2ww referrals and cancers, and a two-sample test of proportion was used for changes in conversion rate and detection rate. All mentioned comparisons were statistically significant (p<0.05).

RESULTS

For women aged 70 and over, there were 16,412 referrals for suspected breast cancer and 13,640 breast symptom referrals in February to April 2014, a 67% increase on the 9,803 referrals in February to April 2012 (Figure 2; Figure 5). There was a clear spike in the number of referrals during the campaign, which reduced in the months following the campaign. However, the number of referrals in May to August 2014 remained 27% higher than in May to August 2012.

The impact on cancers diagnosed after a 2ww referral (including breast symptom referrals) for women aged 70 and over was less pronounced (Figure 3). In February to April 2014, there were 2,820 such cancers, a 25% increase on the 2,251 such cancers in February to April 2012.

There did appear to be a clear impact on the number breast cancers recorded in CWT. There were 4,164 CWT recorded breast cancers in March to May 2014, a 31% increase on the 3,179 cancers in March to May 2012.

However, the impact on the detection rate and the conversion rate was less clear (Figure 4). Both the detection rate and the conversion rate fell. The detection rate in March to May 2014, 71%, was 5 percentage points lower than the detection rate in March to May 2012, 77%. The conversion rate in February to April 2014, 17%, was 6 percentage points lower than the conversion rate in February to April 2012, 23%.

DISCUSSION

The large increase in the number of referrals in the target age group provides good evidence that the campaign had a positive impact on the likelihood of women with breast cancer symptoms in the target age group discussing them with their GP and subsequently being referred.

The increase in CWT recorded cancers, and the increase in cancers diagnosed as a result of a referral for suspected breast cancer or for breast symptoms, provides further evidence of a positive campaign impact on diagnoses of the breast cancer in women aged 70 and over “Be Clear on Cancer” campaign.

It is interesting that despite the increase in the number of 2ww breast cancers, the detection rate did not increase, but this was explained by the larger increase in the number of CWT recorded cancers. Some preliminary work suggests this may be due to increases in the number of screen-detected cancers (either from a pilot extension of the screening age or self referral). The future investigation of screening and routes to diagnosis data for these women, once available, will be useful in order to better understand the impact of the campaign on the diagnostic pathway for these women.

CONCLUSION

The national breast cancer in women over 70 “Be Clear on Cancer” awareness campaign had a large impact on urgent GP referrals for suspected breast cancer for women aged 70 and over.

There also appeared to be an impact on the number of diagnoses, with increases in both the number of CWT recorded breast cancers and the number of breast cancers diagnoses resulting from an urgent GP referral for suspected breast cancer or breast symptom referral during the campaign months.

In comparison to previous “Be Clear on Cancer” campaigns, the different risk rather than symptom focus and largely daytime scheduling does not appear to have adversely affected the impact of the campaign.

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