POINT OF VIEW

Who influences women to practise breast self examination?

P.A.Lewis and M.Charny

Abstract

A systematic random sample of 1 in 40 of the electoral register for the four Cardiff parliamentary constituencies drew responses from 2254 women. Breast self examination (BSE) was reported by 53% with 8% failing to answer. Nearly two-thirds of the women who undertake BSE report doing so because of media influence and one-quarter as a result of their general practitioner's advice. However only 33% reported that their frequency of examining was monthly. As this frequency is considered to be a necessary condition for correct screening then 67% of those practising BSE are doing so incorrectly, irrespective of other aspects of their technique. If the enthusiasm women have reported for BSE is to be productive then more specialist training and advice needs to be given.

Introduction

The Forrest report (1987) evaluated evidence for breast cancer screening and concluded that deaths from breast cancer in women aged 50—64 years who are offered screening by mammography can be reduced by one-third or more. As a result the Secretary of State for Health and Social Services recently announced the establishment throughout England of a breast cancer screening programme for women aged 50—64 based on mammography at 3-year intervals.

Breast cancer is a leading cause of mortality and morbidity among women. The mortality rate in the UK from breast cancer (73.7 per 100 000 women) is the highest in Western Europe and higher than in parts of North America (Warden, 1987). Results from an American randomized controlled trial of screening by complete mammography and physical examination for breast cancer showed that mortality from breast cancer was one-third lower among 31 000 women randomly allocated to a study group compared with 31 000 randomly allocated to a control group (Shapiro et al., 1982). A Swedish randomized study has shown similar results with less frequent screening and single view mammography (Tabar et al., 1985). Two non-randomized studies (Verbeck et al., 1984; Collette et al., 1984) support the results of the randomized studies. A population-based study in Holland showed that the odds ratio of a woman dying of breast cancer if she had been screened was less than half that of an unscreened woman (Collette et al., 1984).

The UK Government's initiative in establishing a mammography based breast screening programme for women aged 50—64 is likely to lead to an increased public awareness of the problem of breast cancer in all women including those in age groups not covered in the programme.

Although the Forrest report states that the screening policy does not necessarily exclude other groups...
from receiving mammography on demand, an alternative or supplementary screening policy which has been promoted is breast self examination (BSE). It is difficult to evaluate the sensitivity and specificity of this test and to measure its effectiveness in reducing mortality. It has been argued that BSE leads to unwarranted anxiety, the risk of false reassurance, and unnecessary medical investigation, particularly in younger women (Frank and Mai, 1985). Until the results of a randomized controlled trial of the effect of BSE on the prognosis of breast cancer is available, the costs and benefits of BSE cannot be adequately assessed. The first analysis of results from the UK trial of early detection of breast cancer (UK Breast Cancer Detection 1981) will be available in 1988. Part of this trial includes two populations in which every woman aged 45—64 has been invited to a class to learn BSE, and has also been offered the services of a self-referral clinic. Other populations in the study are invited for screening by mammography and/or clinical examination and there are control populations. The Forrest Report states that 'There is no evidence that clinical examination or BSE is effective when used alone. These methods may have some value when used in combination with mammography, but their contribution requires further assessment.'

Although no results are yet available from a randomized controlled trial of the effect of BSE on breast cancer prognosis, there is some evidence to suggest that BSE leads to the earlier diagnosis of breast cancer (Greenwald et al., 1978). Three centres in America have reported case studies in which BSE has been associated with favourable tumour characteristics, in terms of tumour size and the involvement of axillary nodes, and earlier stage at diagnosis (Foster et al., 1978; Feldman et al., 1981; Huguley and Brown, 1981; Foster and Constanza, 1984). It has also been shown that women who had been taught BSE and who regularly practised the technique presented with significantly smaller tumours (Vessey et al., 1987). These researchers have emphasized that examination techniques must be properly taught if false positives and the consequent suffering, anxiety and cost are to be avoided (Robertson, 1987).

**Method**

During February and March 1986 the Cardiff Health Survey was carried out to investigate health attitudes, knowledge, practices and beliefs. A total of 6033 people were approached, of whom 71% responded. A full description of the subjects may be found elsewhere (Charny and Lewis, 1987).

Responders were asked their date of birth, sex and marital status. In addition the following questions were asked:

Do you examine your breasts regularly?

PLEASE CIRCLE ONE NUMBER

Yes, because the doctor advised it 1
Yes, because my friends or family encouraged me 2
Yes, because of what I have heard on TV, radio, magazines or pamphlets 3
No 4

THIS QUESTION IS ONLY FOR WOMEN WHO EXAMINE THEIR BREASTS, OTHERWISE LEAVE BLANK

How often do you examine your breasts?

PLEASE CIRCLE ONE NUMBER

Once a day 1
Once a week 2
Once a month 3
Once a year 4
Now and then 5

**Results**

Of the original sample of 4269 subjects, 2254 (53%) were females. A total of 184 (8%) of the females failed to answer the questions on BSE. This group was not found to differ appreciably from the remainder in terms of age, marital status, social class and education. A total of 814 (39%) did not examine their breasts. Even if all the non-respondents were non-examiners this would only bring the percentage up to 47%. The non-responders have been eliminated from subsequent analysis.

Of those females who responded, 61% said they examined their breasts and 39% were non-examiners. The women who did practise BSE gave the follow-
Who influences breast self examination?

Table I. The numbers and percentage in each age group by whether they practise BSE

<table>
<thead>
<tr>
<th>Age in years n (%)</th>
<th>16–24</th>
<th>25–34</th>
<th>35–44</th>
<th>45–54</th>
<th>55–64</th>
<th>65–74</th>
<th>75+</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examiners</td>
<td>172 (49)</td>
<td>256 (64)</td>
<td>234 (68)</td>
<td>196 (66)</td>
<td>188 (64)</td>
<td>120 (58)</td>
<td>41 (40)</td>
<td>54 (66)</td>
<td>1256 (61)</td>
</tr>
<tr>
<td>Non-examiners</td>
<td>178 (51)</td>
<td>146 (36)</td>
<td>110 (32)</td>
<td>100 (34)</td>
<td>103 (36)</td>
<td>88 (42)</td>
<td>61 (60)</td>
<td>28 (34)</td>
<td>814 (34)</td>
</tr>
<tr>
<td>Total</td>
<td>350</td>
<td>401</td>
<td>344</td>
<td>296</td>
<td>286</td>
<td>208</td>
<td>102</td>
<td>82</td>
<td>2070</td>
</tr>
<tr>
<td>Ratio of non-exam:</td>
<td>1.03</td>
<td>0.57</td>
<td>0.47</td>
<td>0.51</td>
<td>0.56</td>
<td>0.73</td>
<td>1.49</td>
<td>0.52</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Table II. The numbers and percentage in each age group who practise BSE for the two major reasons

<table>
<thead>
<tr>
<th>Age in years n (%)</th>
<th>16–24</th>
<th>25–34</th>
<th>35–44</th>
<th>45–54</th>
<th>55–64</th>
<th>65–74</th>
<th>75+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor advised</td>
<td>50 (34)</td>
<td>64 (28)</td>
<td>55 (27)</td>
<td>45 (27)</td>
<td>27 (17)</td>
<td>27 (29)</td>
<td>9 (30)</td>
<td>12 (27)</td>
</tr>
<tr>
<td>Media influence</td>
<td>97 (66)</td>
<td>167 (72)</td>
<td>150 (73)</td>
<td>119 (73)</td>
<td>128 (83)</td>
<td>65 (71)</td>
<td>21 (70)</td>
<td>35 (73)</td>
</tr>
<tr>
<td>Total</td>
<td>147</td>
<td>231</td>
<td>205</td>
<td>164</td>
<td>155</td>
<td>92</td>
<td>30</td>
<td>47</td>
</tr>
<tr>
<td>Ratio media:doctor</td>
<td>1.94</td>
<td>2.61</td>
<td>2.73</td>
<td>2.64</td>
<td>4.74</td>
<td>2.41</td>
<td>2.33</td>
<td>2.92</td>
</tr>
</tbody>
</table>

Table III. The numbers and percentage in each ‘frequency of examination’ category by the two main reasons n (%)

<table>
<thead>
<tr>
<th>Frequency of Examination</th>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Yearly</th>
<th>Now and then</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor advised</td>
<td>15 (44)</td>
<td>77 (30)</td>
<td>107 (30)</td>
<td>1 (14)</td>
<td>86 (21)</td>
<td>3 (27)</td>
<td>289 (27)</td>
</tr>
<tr>
<td>Media influence</td>
<td>19 (56)</td>
<td>178 (70)</td>
<td>244 (70)</td>
<td>6 (86)</td>
<td>328 (79)</td>
<td>7 (73)</td>
<td>782 (73)</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>255</td>
<td>351</td>
<td>7</td>
<td>414</td>
<td>11</td>
<td>1071</td>
</tr>
<tr>
<td>Row</td>
<td>3</td>
<td>24</td>
<td>33</td>
<td>1</td>
<td>39</td>
<td>1</td>
<td>101</td>
</tr>
<tr>
<td>Percentage</td>
<td>1.27</td>
<td>2.31</td>
<td>2.28</td>
<td>2.00</td>
<td>3.81</td>
<td>2.31</td>
<td>2.71</td>
</tr>
</tbody>
</table>

Table ID. The numbers and percentage in each frequency of examination category by the two main reasons n (%)

Influences of the examiners are given by age in Table II. This is again surprisingly constant at just under 30% reporting that they performed BSE on their doctor’s advice between ages 25–54. Rather more than 30% gave this reason for the 16–24 group and fewer (17%) for the 55–64 group.

The frequency of BSE is given by the two main influences in Table III. Of those responding to their doctor’s advice, 37% examine monthly while 31% of those responding to the media examine at this frequency.
Discussion

The implementation of any breast screening programme must consider the association between the age and incidence of breast cancer. Further, the success or failure of a screening programme depends on performing the test correctly. This study reports that 61% of responders are sufficiently concerned about breast cancer to practise some form of BSE. This percentage rises to 66% in the age range 35 to 64. This concern over aspects of health is encouraging and arrangements should be made to harness this interest in the most beneficial directions. It has been shown that, properly taught, BSE could lead to a reduction in the order of 20—30% in the number of women presenting with positive lymph nodes, which may be associated with an increase in survival (Vessey, 1987). These authors stressed that women must be properly taught examination techniques if cancers are to be diagnosed earlier and also that ‘there was little difference in tumour staging at diagnosis between women who did not practise self-examination at all and those who did but had not been taught’. Also, an American study found that women who learned BSE from a physician or a nurse were more likely to practise BSE than if knowledge came from another source (Huguley and Brown, 1981). The frequency with which Cardiff women were practising BSE raises interesting questions. Of the responders 18% said they were practising BSE on a monthly basis. Therefore the remaining women were either practising BSE incorrectly, in terms of frequency, or not at all. The Cardiff Health Survey did not include questions on the technique involved in BSE. It is therefore not possible to comment on the extent to which those women who practise BSE at the appropriate frequency were doing so correctly in terms of technique. However, as the correct frequency of examination is thought to be a necessary condition for good technique, it may be seen that of the 61% of women who are motivated to practise BSE, not more than 30% of these can be examining correctly. Instruction in the technique of BSE would appear to constitute an important part of the practice. It is clear that from the Cardiff Health Survey that nearly two-thirds of women practise BSE as a result of media influence and about one-quarter as a result of their GP’s advice. However there are a greater percentage in the ‘doctor advised’ group who achieve the correct frequency although it should be noted that this is still relatively low.

This study suggests that the media is sensitizing women to the issue of BSE, but that the GP or any primary health care professional is needed to instruct women properly in the technique. Greater care needs to be taken by the media to ensure that the elements of good practice receive more emphasis, but even so an important part of the media message might be that people should be encouraged to attend classes run by professionals and that health authorities should provide such a service.

Acknowledgements

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References

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