
Breast cancer: views of general practitioners on its detection and treatment

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SUMMARY: A considerable proportion of women with breast cancer in this country present for treatment in late stages of the disease; Britain's primary health-care system means that in most cases the possible diagnosis of breast cancer is first made in general practice. This offers ample opportunity for early diagnosis and a better understanding about the way the general practitioners perceive the problems associated with the disease. With that specific aim, the present article reports on a survey conducted simultaneously in Oxford and in Edinburgh. Results show that general practitioners in the survey are deeply concerned about breast cancer and see a definite role for themselves in its early detection and long-term management. They also see a need for more health education that includes the encouragement of breast self-examination programmes. Most are in favour of open-access breast clinics for women and, in general, they feel positive about self-education programmes.

Introduction

A CONSIDERABLE proportion of women with breast cancer still present to their doctors in the late stages of the disease, and these figures have not changed appreciably over the past 20 years.^{1,2} Britain's universal primary health care system means that the possible diagnosis of breast cancer is first made in general practice. It is therefore important to have a better understanding about the way general practitioners perceive the problems associated with the early detection, treatment and long-term care of breast cancer patients and their own role in this.

The present study was set up to learn more about general practitioners' attitudes and opinions about breast cancer. It is hoped that our results will contribute

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to the design and implementation of programmes aiming at earlier identification of breast cancer patients as well as at improved follow-up.

Methods

The study was conducted in November and December 1981, simultaneously in Oxford and Edinburgh. Both cities are participating in the national trial of early detection of breast cancer, Edinburgh as a screening centre and Oxford as a control centre.³ In Edinburgh, the study takes the form of a randomized trial with allocation according to practice, so that half of the general practitioners are directly involved in screening and half are not. It is fair to assume that on the whole all general practitioners in Edinburgh have been much more involved in discussion related to possible benefits of secondary prevention in breast cancer, particularly if their practices were assigned to screening.

To keep costs low, a one in three random sample (total 138) was selected from the lists of 165 Oxford and 249 Edinburgh general practitioners. A postal survey was then conducted: a covering letter was enclosed with the questionnaires stressing the confidential nature of the information gathered. A reminder was sent two weeks later which improved the 76 per cent initial overall response rate to about 86 per cent. Response rates were similar in both cities.

The questionnaire included 30 questions on prevalence, early detection, self-examination, women's attitudes and knowledge, results of treatment, effects of mastectomy, and management of breast cancer patients. Most used a Likert-scale format: a statement followed by a six-point scale for the answer, from 'strongly agree' to 'strongly disagree'. A six-point scale was favoured so as to avoid a central category, the two middle points indicating a 'not sure, tend to agree' (or disagree) which forced the respondents to define their views more clearly rather than give a simple 'don't know' or 'neutral' reply.

Results

Altogether, 112 correctly completed questionnaires were returned and analysed (45 from Oxford, 67 from Edinburgh), representing 82 per cent of the study population. Age distribution of the general practitioners was similar in both cities, with a total of 54 under 45 years of age and only three aged over 65 (Table 1); there were 22 female general practitioners in total, 15 of them in Edinburgh. Analysis was done by city, sex and age group of the general practitioners. As the numbers in each group were small, large differences are required for statistical significance.

Table 1. Age distribution of the general practitioners in the study population.

	Age (years)					Not known
	Under 35	35-44	45-54	55-64	65+	
Oxford	8	15	14	5	1	2
Edinburgh	13	18	20	13	2	1
Total	21	33	34	18	3	3

Table 2. Answers to questions about early detection of breast cancer.

	Percentage of respondents agreeing	
	Edinburgh (n=67 GPs)	Oxford (n=45 GPs)
1. There is nothing one can do to prevent breast cancer	50	62
2. The evidence pointing to a decrease in mortality is not convincing	37	69*
3. Only women who present early have the possibility of cure	63	47
4. Screening (for breast cancer) should be done by the GP	45	61
5. Further randomized trials are necessary before making a decision about screening facilities	37	58**
6. Screening should be available on demand	42	27

* $P=0.009$, ** $P=0.05$.

Prevalence of breast cancer

Of those general practitioners who had practised for longer than five years, more in Edinburgh (53 per cent) believed that the frequency of consultations for breast problems had increased over the past five years compared with Oxford (31 per cent; $P = 0.009$). Female general practitioners were more likely than the males to think that consultations had increased (72 per cent and 38 per cent respectively, $P = 0.02$). Altogether, 55 per cent thought that breast cancer was more common in the UK now than it was 30 years ago, but there were no differences between cities, sex or age groups.

Early detection

The answers to questions on early detection are shown in Table 2. More Edinburgh general practitioners were influenced by the evidence pointing to a decrease in mortality through early detection, and, interestingly, so were female general practitioners (68 per cent compared with 48 per cent for males). Two possible replies sug-

Table 3. Answers to questions about breast self-examination (BSE).

	Percentage of respondents agreeing	
	Edinburgh (n=67 GPs)	Oxford (n=45 GPs)
1. Women should be routinely taught BSE at age:		
15-24 years	52	70
25-44	89	93
45-64	87	90
over 65	57	67
2. The evidence for the benefits of BSE is disappointing	35	31
3. I feel confident about teaching BSE	76	93*
4. Many women are not capable of performing BSE correctly	46	40

* $P=0.03$.

gesting that screening should be available to women only over 45 or 50 years of age were not selected by any general practitioner.

Breast self-examination (BSE)

The first question was on how often women ask about BSE. In Oxford, the proportion of general practitioners who were asked frequently about BSE was 18 per cent whereas in Edinburgh it was only 6 per cent. Female general practitioners were asked more frequently for this information than males (23 per cent compared with 7 per cent). About 40 per cent thought that requests had increased over the past five years, but female general practitioners perceived this more than males (62 per cent and 37 per cent respectively). The answers to other questions about BSE are shown in Table 3.

The general practitioners were also asked to rank in order of preference who they thought should teach BSE and the results are shown in Figure 1. Health visitors were the most popular choice, followed by nurses. Female and male general practitioners answered this question in a similar way.

Women's attitudes towards breast cancer

About 75 per cent of general practitioners in both cities, for both sexes and age groups, indicated an increase in women requesting more information about breast cancer than five years ago. The answers to the rest of the questions about attitudes and knowledge are shown in Table 4. It is clear that most general practitioners think there should be more education on this topic. Female general practitioners were more concerned about the possible effects of health education campaigns.

General practitioners were then asked to rank in order

of importance the reasons that would explain the failure of patients to refer themselves earlier for treatment (Figure 2).

Results of treatment

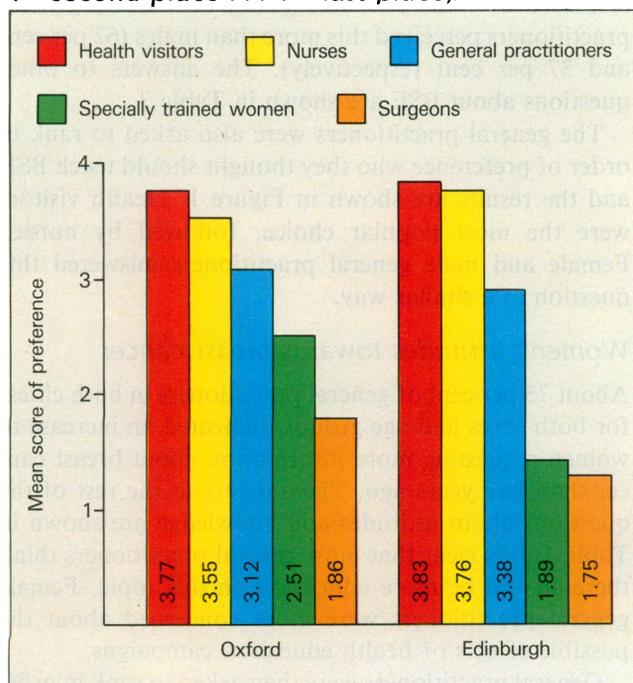
Just over 60 per cent of all general practitioners expected more than 50 per cent of women to be still alive five years after treatment. There were differences between Edinburgh and Oxford doctors in the belief that 'in

terms of survival, the results of treating breast cancer are better now than 30 years ago', 72 per cent of general practitioners in Edinburgh believed this compared with 50 per cent in Oxford ($P = 0.04$). General practitioners over the age of 45 years were more likely to believe this (73 per cent compared with 56 per cent for those general practitioners under 45 years of age, $P = 0.03$). Half the Oxford general practitioners believed that the prognosis for breast cancer is still gloomy compared with 32 per cent of doctors in Edinburgh.

Table 4. Answers to questions about women's attitudes and knowledge.

	Percentage of respondents agreeing	
	Edinburgh (n=67 GPs)	Oxford (n=45 GPs)
1. There should be more health education on breast cancer	84	82
2. The media overstress the importance of breast cancer	27	31
3. Campaigns about BSE cause unacceptably high levels of anxiety	33	25
4. Health education should be redirected towards postmenopausal women	55	62

Figure 1. General practitioners' ranking of the person they would prefer to teach breast self-examination. Answers are expressed as a calculated mean score of preference (score 5 = first place, 4 = second place . . . 1 = last place).



Effects of mastectomy

The results are shown in Table 5. Although only a minority of general practitioners believed that resumption of sexual activity is the main worry for women after mastectomy, there were significant differences between Oxford and Edinburgh. No female general practitioner agreed with that statement, or with the statement that breasts lose their sexual significance in postmenopausal women. All female general practitioners agreed with the statement that female doctors are better able to empathize with patients and significantly more of the younger general practitioners also agreed (77 per cent compared with 55 per cent in older colleagues, $P = 0.05$).

Figure 2. General practitioners' ranking of the most important reasons for women failing to refer themselves early. Answers are expressed as calculated mean score of preference (6 = first place, 5 = second place . . . 1 = last place).

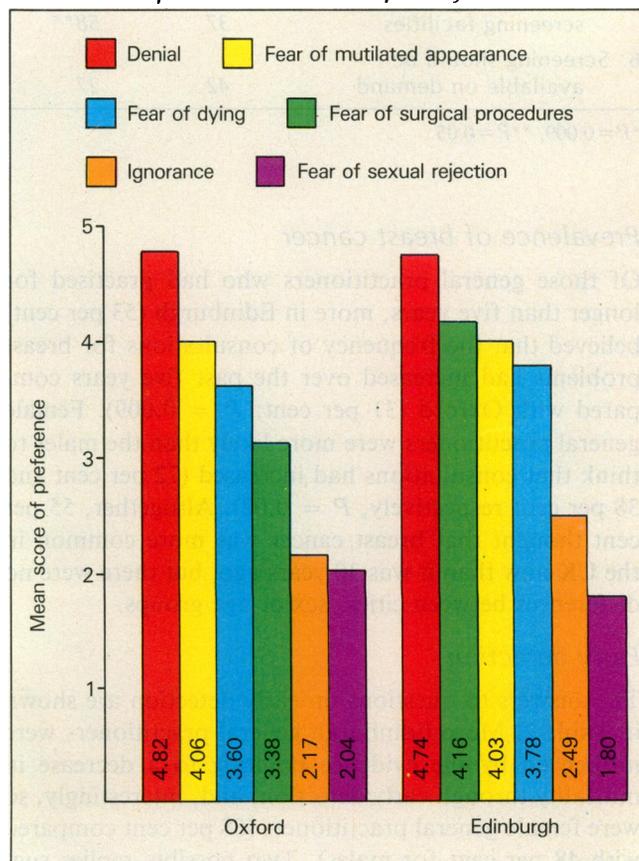


Table 5. The answers to questions about the effects of mastectomy.

	Percentage of respondents agreeing	
	Edinburgh (n = 67 GPs)	Oxford (n = 45 GPs)
1. Resumption of sexual activity is the main worry	9	30*
2. Breasts lose their sexual significance for postmenopausal women	15	9
3. Reconstruction is not necessary for postmenopausal women	23	13
4. Husbands should always be involved in counselling sessions	76	98**
5. Female doctors are better able to empathize	68	64

* $P=0.01$, ** $P=0.004$.

Management

About two thirds of general practitioners favour check-up at regular intervals for women with a history of benign breast disease. Half the doctors in both cities would welcome 'open access' clinics for women (self-referred without consulting their general practitioners) and 30 per cent were prepared to consider such clinics if the women wanted them; most of the remaining 20 per cent insisted that 'patients should always consult their general practitioner first'.

Finally, general practitioners were presented with a summary of a typical common case and asked for their reactions on how to handle the situation. Oxford general practitioners were more likely to ask to see the husband (78 per cent compared with 61 per cent in Edinburgh, $P = 0.02$), tell the patient that mastectomy is not always necessary these days (76 per cent compared with 62 per cent, $P = 0.09$) yet were less likely to discuss reconstruction of the breast (45 per cent compared with 58 per cent, $P = 0.05$). Breakdown of the data by sex has only shown one statistically significant difference, female general practitioners indicating more often that they would see the husband as well (79 per cent compared with 64 per cent, $P = 0.04$). More of the older general practitioners would find the discussion with the patient difficult (60 per cent compared with 30 per cent in younger colleagues, $P = 0.04$).

Long-term care

The last question was open-ended, and sought comments and suggestions about the after-care of breast cancer patients. On the whole, general practitioners in both Oxford and Edinburgh seem quite satisfied with hospital services provided. However, a number of prob-

lems were raised, together with some suggestions. For example, some thought communication between hospital and primary health care was not adequate, that too many people were involved which might lead to confusion, psychological aspects were often neglected, that research and training sometimes interfered with care and that patients were not well informed. It was suggested that a seminar for general practitioners on counselling sessions could be useful, that they should be more involved in communicating the diagnosis, lay woman groups should be encouraged and that more support should be extended to the family. They also felt strongly that earlier involvement by general practitioners in after-care was desirable.

Discussion

On the whole, general practitioners in our study are deeply concerned about breast cancer and are fairly well informed. In spite of current evidence, only half of them seem convinced that early detection leads to a decrease in mortality.^{4,5} As expected, there was a significant difference between the two cities on this question, Edinburgh doctors being more convinced of the benefits, probably because they have been more exposed to the issue in relation to the screening trial. On the other hand, two thirds of general practitioners in both cities are convinced about benefits of breast self-examination, for which the evidence is less well established.

An increase in consultations for breast problems was thought to have occurred, especially in Edinburgh, perhaps because of increased awareness. There was also said to be an increase in the number of women asking for information. This may be a reason why the general practitioners in our survey favour more health education, and do not think that the media overstress its importance. The great majority favour the teaching of breast self-examination to women aged 25 to 64 years.

It is perhaps surprising that requests for information about breast self-examination are relatively uncommon, though female general practitioners seem to be asked more often. Interestingly, our survey in Scotland shows that though most women had heard of BSE, their knowledge was almost always derived from media sources and not from health service personnel.⁶ There seems to be a communication gap here which general practitioners are in a good position to remedy.

We were surprised to find that many general practitioners believe screening should be done by them: this implies that they regard screening as rewarding even when done by clinical examination alone. On the other hand, many general practitioners (particularly in Edinburgh) seem to favour screening facilities using mammography for all women. There is thus some misunderstanding. First, clinical examination may not be sensitive enough for mass screening; secondly, mammography should not be offered to young asymptomatic women because of the hazards of radiation to the

breast. We must also consider the fact that population screening for breast cancer is not appropriate for young women because the disease is rare under the age of 35 years.

A surprisingly high proportion (80 per cent) of general practitioners in the survey would welcome, or be prepared to consider, 'open access' clinics to which women who are concerned about their breasts could refer themselves. We did not ask for comments on the implications of such clinics, such as the necessity of providing 'feedback' information to general practitioners.

General practitioners indicated clearly that the most important reason for delay in presentation was denial on the part of the women concerned. This accords well with some studies which show that delay may be caused by a 'mechanism determined by unconscious psychoprocesses, including the use of ego defences of denial and suppression'.⁷ However, some studies have shown that lack of awareness of the significance of symptoms may also play an important part in the reason for delay in seeking treatment.⁸ We must not forget that diagnostic errors and administrative delays do still occur, albeit uncommonly.⁹

Most studies on five year survival rates in Britain give figures around 50 per cent for stages I and II of the disease.^{1,10} The 60 per cent of general practitioners who expect a better survival rate seem to be somewhat optimistic: interestingly, this trend was also found in a recent study in Southampton.¹¹ Consistently, general practitioners believe that, in terms of survival, results are better now than 30 years ago, perhaps because survivors are seen regularly and those who have died are obviously not; however, there is little evidence to support this. Nevertheless, many general practitioners are 'gloomy' about the prognosis of breast cancer, a feeling likely to be perceived by many patients under their care, with or without the disease.

Judging from their replies on sexual activity and breast reconstruction, doctors seem to have considerable sympathy and understanding for older women. They also have sympathy with the husbands of breast cancer patients and, particularly in Oxford, are in favour of involving the husband in counselling sessions. General practitioners in the two cities differ in their approach to 'routine' breast cancer patients. In Oxford, she is more likely to be told the diagnosis and that mastectomy is not always necessary, but she is less likely to be given information about reconstruction. Further analysis shows that general practitioners in screening practices in Edinburgh are significantly more likely to discuss reconstruction than general practitioners in control practices, a finding which probably reflects their increased experience of the treatment of early disease.

Comments and suggestions offered in the last section reflect three major concerns. First, many general practitioners would like to be involved throughout the whole process of diagnosis, treatment and long-term care,

believing that their involvement would maintain the personal care needed by these patients. Secondly, they would welcome an improvement in communication between themselves and the hospital team. Lastly, they have recognized and indeed emphasized the importance of providing more psychological support to patients and their families over the long term.

Conclusions

There are some straightforward conclusions from this study. On the whole, the general practitioners in our survey are deeply concerned about breast cancer and see a definite role for themselves. They also see a need for more health education, in which their involvement is desirable and important. They are indeed in a key position to improve their rate of early diagnosis in this country by communicating these beliefs to their patients, and, together with health visitors and nurses, encouraging breast self-examination. We welcome the fact that most general practitioners in the study were in favour of open-access breast clinics for women, and that in general they feel positive about health education programmes.

References

1. Haybittle JL. Results of treatment of female breast cancer in the Cambridge area 1960-71. *Br J Cancer* 1979; **40**: 56-61.
2. Langlands AO, Kerr GR, Shaw S. The management of locally advanced breast cancer by X-ray therapy. *Clin Oncol* 1976; **2**: 365-371.
3. Chamberlain J. Trial of early detection of breast cancer. *Br J Cancer* 1981; **44**: 618-627.
4. Shapiro S. Evidence on screening for breast cancer from a randomised trial. *Cancer* 1977; **39**: 2772.
5. Moskowitz M, Gartside PS. Evidence of breast cancer mortality reduction: aggressive screening in women under age 50. *Am J Radiol* 1982; **138**: 911-916.
6. Roberts MM, French K, Duffy J. Breast cancer: what do Scottish women know? *Soc Sci Med* 1984 (in press).
7. Magarey CJ, Todd PB, Blizard PJ. Psycho-social factors influencing delay and breast self-examination in women with symptoms of breast cancer. *Soc Sci Med* 1977; **11**: 229-232.
8. MacArthur C, Smith A. Delay in breast cancer and the nature of presenting symptoms. *Lancet* 1981; **1**: 601-603.
9. Adam S, Horner JK, Vessey MP. Delay in seeking treatment for breast cancer. *Community Med* 1980; **2**: 195-201.
10. Hamilton T, Langlands AO, Prescott RJ. The treatment of operable cancer of the breast: a clinical trial in the S. East Region of Scotland. *Br J Surg* 1974; **61**: 758-761.
11. Nichols S, Waters WE, Wheeler MJ. Management of female breast disease by Southampton general practitioners. *Br Med J* 1980; **281**: 1450-1453.

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