The presentation and management of breast symptoms in general practice in South Wales

The BRIDGE Study Group

SUMMARY

Although there is increasing interest in the primary care management of breast disorders, there are few data on their presentation and management. This study recorded presentation rates of breast symptoms in 34 general practices in South Wales. These ranged from 1.9 to 14.8 patients per GP per year (median = 6.5): 46.4% with breast lump, 28.2% with breast pain, 16.2% with lumpiness and 5.5% with nipple discharge. Fifty-five per cent of all patients were referred, substantially more than previously recorded. Some referrals for breast disease may be 'inappropriate' according to current management guidelines.

Keywords: breast symptoms; breast cancer; referral rates; primary care management.

Introduction

BREAST cancer is the commonest cancer among women, with 34 000 cases in the UK each year.[1,2] Primary and secondary care management of breast disease has received increased attention, and 'best practice' guidelines have been disseminated to all UK general practitioners (GPs).[3] Three earlier studies of breast symptom presentation in UK general practice identified different consultation rates, ranging from 13 patients[4,5] to 34 patients[6] per GP per year. There is a need for up-to-date information on breast symptom presentation and management in a wide range of general practices to inform the debate about 'appropriate' management[4] and efficient distributions of service provision between primary and secondary care. We report here on the first stage of an ongoing study.

Method

All 100 practices with three or more partners in southern Glamorgan in 1995–1996 were invited to participate. We excluded GPs in one- or two-partner practices (18%) for efficiency of data collection. Forty-five practices agreed initially and 34 completed the study, yielding 153.75 whole-time equivalent GPs for between six and 14 months.

Doctors recorded data from consultations with women aged over 17 in which a new breast symptom was presented. Demographic details, reason for consultation, symptoms, signs, family history, and management were recorded. Electronic data from the Welsh GP Morbidity Database (WGPMD), representing 10% of the population of Wales, provided a 'yardstick' to estimate the completeness of patient ascertainment.

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Results

Presentation and referral rates

Doctors recorded 1020 new presentations of breast symptoms. Female GPs (27.2% of sample) recorded 53.8% of the consultations. The number of patients recorded by individual practices was between 1.9 and 14.8 patients per GP per year (median = 6.5). The median recruitment rate in the first four months of the study, before study fatigue became evident, as in other studies,[5,7] was 9.6 patients per GP per year. The mean age at presentation was 43.5 years (range = 18–92, SD = 12.8). The average referral rate was 55.3%. These rates increased with age from 49.0% for women aged 18 to 25 years to 73.0% for women aged over 65 years.

Symptom distribution

Symptoms were categorized into a hierarchy: breast lump (with or without pain), lumpiness (without specific lump, with or without pain) or nipple discharge were judged more important than breast pain alone. For example, half the patients with breast lump also reported breast pain, but were recorded as breast lump patients. Table 1 shows the distribution of symptoms and referral rates for such presentations.

Validation and assessment for bias

The presentation rate of 9.6 per GP per year compares with 19.2 per GP per year in the WGPMD. The latter may be an over-estimate because some consultations have more than one diagnosis coded. The proportion of patients with breast pain and lump did not differ significantly between higher and lower recording practices, or between the first and second half of the study. However, patients from lower recording practices were more likely to be referred (47.2% in the eight highest recruiting practices, versus 73.5% in the eight lowest recruiting practices; $P<0.001$), as were those recruited in the second half of the study (61% versus 51%; $P<0.01$). A comparison of participating ($n = 34$), non-participating ($n = 55$), and other practices who left the study ($n = 11$) showed no differences in fundholding status, number of partners or female partners, or population density of the practice areas. (Practices with one or two partners were excluded from this study.)

Discussion

Practices recorded patients at rates ranging from 1.9 to 14.8 per GP per year. The upper limit in this study is similar to the average rates documented in previous[4,5] and current[8] studies, and is supported by contemporaneous electronically recorded data from other general practices in Wales. Thus, the practices where recruitment was highest show concordant results with previous studies. The validation assessments we undertook do not suggest a substantial systematic bias in the nature of patients ascertained

Table 1. Primary presenting symptom and subsequent referral rate. 'Percentage referred' excludes 18 patients where referral is not known.

Symptom	Number of presentations	Percentage of all presentations	Number referred	Percentage referred
Breast lump	473	46.4	369	78.0
Lumpiness	165	16.2	72	43.6
Nipple discharge	56	5.5	36	64.3
Pain only	288	28.2	72	25.0
Other	38	3.7	15	39.5
Total	1020	100	564	55.3

from practices with lower recruitment. Therefore, our findings about symptom presentations in particular provide reasonable information about current practice.

Breast lump was the commonest presentation with a rate (46.4%) broadly consistent with the 36–40% identified elsewhere.[4-6,8] Breast pain was a less frequent reason for presentation (28.2%) than recorded elsewhere (40–52%). This reflects a different recording protocol in other studies[4-6,8] in which 'lumpiness' was not distinguished from other symptoms.

The average referral rate at first presentation (55%) is higher than reported elsewhere, either currently (31.9%)[8] or previously (25–32%).[4-6] This figure may rise after reviewing patients not initially referred. Possible reasons for the increased referral rate in this study are:

- the higher proportion of breast lump presentations compared with other studies,
- selective recruitment of patients who are more likely to be referred,
- regional variations in propensity to refer,
- accessibility of secondary care in this area, and
- extraneous factors, such as the influence of media campaigns on patient expectations and help-seeking behaviour.[4,5,9]

There is evidence in this study to support the first two explanations, but the extent of the increased referral rate suggests that the other influences may also be relevant.

The high referral rates for all breast symptoms suggests that there is scope for the UK national guidelines[3] to alter referral rates. In particular, these guidelines may reduce rates for lumpiness and breast pain, which have low predictive value for serious breast pathology.[10] All inappropriate referral decisions represent an inefficient use of NHS resources (time and investigations) and may generate unnecessary anxiety for women. The non-referral of 22% of patients with breast lump may be a source of concern as these patients may warrant further investigation. Guideline implementation might be expected to increase referral for women with breast lump.

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