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## Research papers

# Breast cancer awareness in Britain: are there differences based on ethnicity?

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## ABSTRACT

This is the first study to investigate breast awareness and breast cancer knowledge and understanding, and breast awareness behaviours among women from different black and minority ethnic (BME) groups in Britain. The study also aimed to identify modes of dissemination that are likely to be successful in promoting breast awareness among these groups.

Face-to-face interviews were conducted with 816 BME women, and telephone interviews were conducted with 552 women from the general population. Findings showed significant differences in levels of breast awareness and breast cancer knowledge both between the different BME groups and between them and the general population. In particular, BME women knew much less about breast cancer, symptoms and risk factors compared with the general population. There were also differences in behaviour, with 43% of BME women reporting that they did not practise breast awareness, often because they did not know what to look for. BME women also reported lower uptake of screening invitations.

These disparities in levels of breast awareness knowledge and behaviours between women from different BME groups and the general population are extremely worrying. They suggest that BME women are much less aware of the disease and are less well equipped to detect early signs of breast cancer, factors that potentially affect their treatment choices and overall prognosis. The findings clearly demonstrate the need for more inclusive breast awareness education campaigns that are relevant to, and appropriate for, a diverse population. The implications for further research and breast awareness education are also discussed.

**Keywords**: breast cancer, minority ethnic health, women's health

## Background

Breast cancer is now the most common cancer in the UK. In 2001, there were around 40 790 breast cancer cases diagnosed in women and around 290 in men. Approximately 80% of breast cancers occur in postmenopausal women. There are limited data available on breast cancer incidence and mortality among people from different black and minority ethnic (BME) groups in the UK, largely due to the lack of adequate information on ethnicity in cancer registration data or death registration data (Harding and Allen, 1996; Muir, 1996; National Cancer Alliance, 2001; Harding, 2005; Linklater *et al*, 2005). This is despite the requirement, since 1995, for the health service to collect data on ethnicity as part of the 'admitted patient contract minimum data set' (National Cancer Alliance, 2001). Death certificates usually record country of birth but not ethnicity; therefore we do not know the true numbers of BME women dying from breast cancer. In addition, data for BME groups do not include white groups such as the Irish, one of the largest minority groups in Britain, and do not allow us to identify the overall breast cancer risk of subsequent generations of BME populations.

## Rising incidence of breast cancer among BME groups

Breast cancer incidence and mortality are lower among women from BME groups, except for the Irish, compared with the indigenous white British population. However, breast cancer remains the most common cancer in women from BME groups (Bahl, 1996; Harding and Rosato, 1999; Winter *et al*, 1999; Smith *et al*, 2003; Harding, 2005). Further evidence suggests that members of BME groups have significantly poorer outcomes for some cancers, including breast cancer (Selby, 1996). More recently, Harding (in press) reports, from decennial analyses of mortality data, that while breast cancer mortality fell among all women in England and Wales by 4% between 1979–1982 and 1989–1999, it rose among women from the 'other Commonwealth Africa' (72%), the Caribbean (7%), Pakistan (12%) and Scotland (6%). This has been attributed to BME groups being more likely to present late, and therefore be diagnosed at a later stage of the disease (Austin *et al*, 1990; Sensky, 1996).

Overall estimates indicate that the incidence of breast cancer among different BME groups is steadily increasing and will continue to do so as minority ethnic populations grow older and adopt more westernised lifestyles (Bahl, 1996; Harding and Rosato, 1999; Smith *et al*, 2003; Harding, 2005). A recent study of cancer incidence among UK South Asians in Leicester (Smith *et al*, 2003), using cancer registry data 1990–1999, found that adjusted breast cancer incidence rates increased over time, while rates decreased for the rest of the population. Length of residence in England and Wales has also been associated with increased cancer mortality for South Asian migrants (Harding, 2003). There is some evidence to suggest that incidence rates are rising faster among South Asian women than in any other ethnic group, and that younger South Asians are at increased risk compared with the older generation (Kumar *et al*, 2004). It is also proposed that the gap is closing between the incidence of breast cancer in younger South Asian women and the indigenous white British population (Smith *et al*, 2003; Kumar *et al*, 2004). More recently, McCormack *et al* (2004) have shown that even within the South Asian group differences emerge, with Pakistani/Indian Muslims having a significantly higher risk of developing breast cancer compared to all other South Asian subgroups. The authors found this to be largely associated with differences in the women's diet and body size rather than reproductive behaviour. A number of other studies have also suggested that, in the UK, uptake of breast screening is substantially less among South Asians than in the indigenous population (Hoare *et al*, 1994; Kernohan, 1996; Godfrey, 1997; Chiu, 2003).

## Breast awareness

Breast awareness has been recognised by the Government since 1995 as important for the early detection of breast cancer. The breast awareness message is about people knowing how their breasts look and feel normally, so that they feel confident about noticing any change that might be unusual for them. It replaced the traditional routine breast self-examination advice after evidence showed that this had no benefit for early cancer detection, and that it potentially caused harm by increasing the number of women being treated for benign breast conditions (UK Trial of Early Detection of Breast Cancer Group, 1988, 1999). Breast awareness is important because only 20% of patients who attend breast clinics for investigation of suspected breast cancer have been identified by the NHS breast screening programme, whereas 80% are referred by general practitioners (GPs) as a result of noticing signs or symptoms themselves (National Institute for Clinical Excellence (NICE), 2002).

Although there has been no research to date to evaluate the effectiveness and impact of breast awareness health promotion campaigns in improving breast awareness knowledge and breast awareness behaviours. However, Breast Cancer Care has for the past four years conducted breast awareness surveys among the general population. These surveys have identified gaps in breast awareness, with one in five women over the age of 50 years reporting that they do not check their breasts, which rises to one in four women over the age of 70 years (Breast Cancer Care, 2003). The majority of those most at risk, that is those aged over 50, were also found to be less aware that the risk of breast cancer increases with age; 72% ($n$ = 298) of women aged over 50 years and 80% ($n$ = 112) of women aged over 70 years were unaware that breast cancer is more common in older women. The same study also found that 25% of women felt that they did not know very much about breast cancer.

There have been no studies examining or exploring differences in levels of breast awareness knowledge and behaviours among women from different BME groups in the UK. Cultural factors, such as beliefs and attitudes to health and illness, are known to influence cancer prevention behaviour and screening attendance among BME groups (McAvoy, 1991; McAllister and Bowling, 1993; Health Education Authority, 1994; Pfeffer and Moynihan, 1996; Womeodu and Bailey, 1996; Barroso *et al*, 2000; Lodge, 2001). It has also been recognised that health professionals should seek to gain an understanding of patients' beliefs with respect to cancer, so as to avoid any misunderstandings between health professionals and patients (National Cancer Alliance, 2001).

Breast Cancer Care is committed to ensuring that everyone in the UK has access to high-quality breast awareness and breast cancer information. We believe this is an essential part of strategies to increase early detection.

In 2005, as part of Breast Cancer Care's aim to make our services and health promotion programmes more accessible to diverse groups, we commissioned the first comparative study to investigate similarities and differences in breast awareness knowledge and behaviours among women from different BME groups in Britain. The findings of this study were used as part of our 'Same Difference' Breast Cancer Awareness Month Campaign in October 2005, aimed at promoting breast awareness among women from diverse backgrounds.

For the purposes of this study we use the term black and minority ethnic (BME) groups to describe the main ethnic groups in Britain as defined by the 2001 census ethnic categories (Indian, Pakistani, Bangladeshi, black African, black Caribbean, Chinese and Irish). We define the *general population* as being made up of a representative sample of the general population in Britain.

## Aims of the study

The aims of the study were to:

- examine differences in levels of knowledge and understanding about breast awareness and breast cancer among women from BME groups and the general population
- explore attitudes to age as a major risk factor for breast cancer
- look at the uptake of the NHS breast screening programme among women from different BME groups and explore barriers to attendance
- learn where and how women have obtained information about breast awareness and breast cancer, and identify modes of dissemination that are likely to be successful in promoting breast awareness with these groups.

## Method of data collection

In March 2005, Breast Cancer Care commissioned two independent market research companies (Ethnic Focus: Research & Intelligence, and ICM Research Ltd) to undertake separate surveys of the main BME groups and of the general population in Britain. This pragmatic decision was made taking into account the resources of the organisation, the experience of both companies in working with the proposed sample groups, and the urgent need to undertake research in this area. We appreciate that this exposes the research to a number of criticisms regarding its methodological rigour, particularly in terms of sampling strategies, interview methods and analysis techniques. However, we feel this study provides important evidence that merits attention. In essence, the findings of this research provide an important insight into the levels of breast awareness knowledge and behaviours among different BME groups in Britain. However, there is clearly a need for more rigorous research to explore the findings in greater detail.

Face-to-face structured individual interviews were conducted with 816 female respondents from different BME groups (Ethnic Focus: Research & Intelligence), and structured telephone interviews were conducted with 552 female respondents from the general population (ICM Research Ltd). The interviewer recorded the data from each respondent onto a structured written questionnaire. The data were analysed using SPSS.

### Sample

A nationally representative sample of females aged 18+ years without personal experience of breast cancer was recruited for both sample groups, based on age and geographical region (Table 1). The BME sample was achieved using Census 2001 data to allocate sample quotas for the following main ethnic groups: Indian, Pakistani, Bangladeshi, black African, black Caribbean, Chinese and Irish, from which a random sample were selected. Thus the sampling method employed reflects the natural geographical clustering of the BME population and provided a mean of ±3.5 margin of error at 95% confidence level. The general population sample was randomly selected using random digit dialling, and a mean of ±4.34% margin of error at the 95% confidence level was achieved.

The BME sample was slightly younger, with 83% ($n = 676$) of participants being under 55 years compared to 65% ($n = 342$) of the general population sample. The BME sample was also more socio-economically disadvantaged (91% being of social grade C1, C2, D or E) compared with the general population (77.4%) (Table 1). Unfortunately, both survey groups had small sample sizes for Scotland and Wales, thus precluding any geographical analysis. We are also unable to report here sample attrition rates for both surveys or the socio-demographic breakdown for each ethnic group.

Both datasets were analysed using SPSS. Chi-square tests were carried out to identify the statistical significance of results. Please note that where base sizes are smaller than 50 we were unable to carry out any statistical tests, and they will be defined by *.

**Table 1** Final sample of BME and general population respondents

| Variable | General population (*n*) | % | BME population (*n*) | % |
|---|---|---|---|---|
| Total number of participants | 522 | | 816 | – |
| Ethnic group | | | | |
| Indian | | | 214 | 26 |
| Pakistani | | | 171 | 20 |
| Bangladeshi | | | 61 | 8 |
| Black Caribbean | | | 139 | 17 |
| Black African | | | 121 | 15 |
| Chinese | | | 61 | 8 |
| Irish | | | 49 | 6 |
| Age (years) | | | | |
| 18–24 | 60 | 11 | 142 | 18 |
| 25–34 | 98 | 19 | 224 | 27 |
| 35–44 | 98 | 19 | 177 | 22 |
| 45–54 | 86 | 16 | 133 | 16 |
| 55+ | 180 | 35 | 140 | 17 |
| Social class | | | | |
| AB | 118 | 23 | 73 | 9 |
| C1 | 150 | 29 | 144 | 18 |
| C2 | 96 | 18 | 155 | 19 |
| DE | 158 | 30 | 444 | 54 |
| Geographical area | | | | |
| London and South | 184 | 35 | 460 | 56 |
| North and Midlands | 267 | 51 | 301 | 37 |
| Scotland | 46 | 9 | 45 | 6 |
| Wales | 25 | 5 | 10 | 1 |

# Findings

The results of this study confirm anecdotal evidence that women from BME groups have lower levels of knowledge and awareness of breast cancer, and that they are significantly less likely to practise breast awareness or attend breast screening compared to the general population sample. We report here the key similarities and differences between the BME and general population sample groups.

## Knowledge of breast cancer

Approximately one-third (32%, *n* = 263) of the overall BME sample stated that they did not know a lot about breast cancer, which is just over double the percentage reported by the general population sample (15%, *n* = 77). Within the BME sample, Pakistani (43%, *n* = 74) and Indian (33%, *n* = 71) respondents were significantly more likely to report that they did not know a lot about breast cancer compared to the other ethnic groups (Table 2).

Differences in breast cancer knowledge between the two groups appear to be closely linked to differences in levels of exposure to people with cancer. The general population sample was significantly more likely to report that they had acquired some knowledge of breast cancer from a friend or family member who had developed breast cancer (39%, *n* = 205), compared to the BME sample (16%, *n* = 134). This may be a reflection of the lower incidence of breast cancer among many of these BME groups, particularly as members of the BME sample were younger, thereby lessening the likelihood of exposure to breast cancer. However, it could also reflect differences in willingness to talk openly about breast cancer as a result of a general fear of cancer, or socio-cultural/religious attitudes to illness, disease and talking about female body parts. This raises concern for those women from BME groups who do develop breast cancer, because they may experience much greater isolation as a result of these factors. A recent report from CancerBACUP (2004) found that within some communities it is not the custom to ask for or give health information,

**Table 2** Levels of knowledge of breast cancer, symptoms and age as major risk factor

| | General population *n* (%) | BME (total) *n* (%) | Indian *n* (%) | Pakistani *n* (%) | Bangladeshi *n* (%) | Black Caribbean *n* (%) | Black African *n* (%) | Chinese *n* (%) | Irish *n* (%) |
|---|---|---|---|---|---|---|---|---|---|
| 'I don't know a lot about breast cancer' | 77 (15) | 263 (32) | 71 (33) | 74 (43) | 20 (32) | 39 (28) | 18 (15) | 25 (41) | 16 (33) |
| 'I have some knowledge from reading/talking about breast cancer' | 238 (46) | 383 (47) | 79 (37) | 80 (47) | 18 (30) | 77 (55) | 82 (68) | 21 (34) | 26 (53) |
| 'I have some knowledge from friends/relations who have developed breast cancer' | 205 (39) | 134 (16) | 53 (25) | 12 (7) | 21 (34) | 16 (12) | 14 (12) | 11 (18) | 7 (14) |
| 'A lump is the only symptom of breast cancer' (Agree) | 113 (22) | 311 (38) | 104 (49) | 48 (28) | 30 (50) | 46 (33) | 42 (35) | 32 (52) | 9 (18) |
| 'As women get older their chances of developing breast cancer increase' (Disagree) | 110 (21) | 423 (53) | 95 (45) | 87 (51) | 34 (56) | 75 (54) | 78 (65) | 25 (43) | 29 (59) |

which means that some communities have not had a history of listening to health information or requesting information.

Almost half of the respondents in both sample groups (BME 47%, $n = 383$; general population 46%, $n = 238$) reported having gained some knowledge about breast cancer from having read or talked about it, although there was wide variation across different BME groups. This clearly demonstrates the importance of written and verbal communication methods in disseminating breast awareness knowledge to all population groups. However, further research is needed to explore the different ways in which people obtain breast cancer knowledge, to enable more effective targeting of breast cancer health promotion campaigns.

## Knowledge of age as a risk factor

Approximately half of the overall BME sample (53%, $n = 423$) was not aware that risk of breast cancer increases with age, compared with only one-fifth (21%, $n = 110$) of the general population sample. This trend was universally shared by all the different ethnic groups, but was most prevalent among the black African (66%, $n = 78$), black Caribbean (54%, $n = 75$) and Pakistani (51%, $n = 87$) groups (Table 2). This finding is of particular concern for many of these BME groups because their populations are ageing and women need to be aware of the risk. However, it undoubtedly reflects the impact of the wider public media representation of breast cancer as a younger woman's disease.

## Knowledge and awareness of signs and symptoms

There are a number of different signs and symptoms for breast cancer, yet a common misconception is that a lump is the only symptom. The overall BME sample appeared to be much less aware of symptoms other than a lump, with over one-third (38%, $n = 311$) reporting that a lump is the only symptom, compared to only one-fifth (22%, $n = 113$) of the general population sample. A lack of awareness of symptoms other than a lump potentially impedes early cancer detection, which in turn could affect treatment options and survival outcomes (Breast Cancer Care, 2005) (Table 2).

## Breast awareness

Just under half (43%, $n = 347$) of the BME respondents reported that they never practise breast awareness, that is looking at and feeling their breasts to know what is normal for them, compared to only 11% ($n = 56$) of the general population sample (Table 3). Of these BME respondents, over half (56%, $n = 194$) stated that the main reason for not practising breast awareness was that she did not know what to look for. Other reasons included forgetting to check, being afraid or unaware that they should, and not believing it was necessary at their age. This finding suggests that breast awareness campaigns have largely failed in promoting the breast awareness message among women from BME groups, and that urgent action is needed to promote both knowledge of the signs and symptoms of cancer, and positive changes in breast awareness behaviours among these women. Further research is also needed to identify the best ways to promote breast awareness knowledge and behaviour among women from different ethnic and cultural backgrounds.

## Uptake of breast cancer screening

Just under half (45%, $n = 112$) of the overall BME sample who were aged 50 to 70 years reported having never attended the NHS breast screening programme compared to only 9%* of respondents from the general population sample. The main reason given by three-quarters (76%, $n = 85$) of the BME respondents for not attending screening was that they had never been invited. This finding raises serious questions about inequalities in access to healthcare services for BME women in Britain. However, it does require further investigation. The NHS breast screening programme is an important part of an overall strategy to increase early detection of breast cancer and improve survival. Most cancers identified through screening are at an early stage, with five-year survival rates of over 90%. By not attending NHS breast screening, BME women have less opportunity for early cancer detection, which could affect their treatment choices and overall survival.

## Sources of breast awareness and breast cancer information

Respondents from both sample groups reported that they obtained breast awareness and breast cancer information from similar sources. The three main places they received information from were GPs/health professionals, the media, and friends and family. However, the sample groups placed differing emphasis on the latter two.

Over three-quarters (77%, $n = 400$) of the general population sample reported having received breast awareness and/or breast cancer information from the media (TV, radio, newspapers, magazines) compared to only half (51%, $n = 415$) of the BME population. This is unsurprising considering most information resources are targeted at a mainstream, English and

**Table 3** Breast awareness behaviours: looking at and feeling breasts from time to time

| | General population *n* (%) | BME (total) *n* (%) | Indian *n* (%) | Pakistani *n* (%) | Bangladeshi *n* (%) | Black Caribbean *n* (%) | Black African *n* (%) | Chinese *n* (%) | Irish *n* (%) |
|---|---|---|---|---|---|---|---|---|---|
| Yes, often | 245 (47) | 170 (21) | 38 (18) | 40 (23) | 20 (34) | 25 (18) | 38 (32) | 4 (7) | 5 (10) |
| Yes, occasionally | 220 (42) | 295 (36) | 78 (36) | 41 (24) | 27 (46) | 43 (31) | 70 (59) | 16 (26) | 20 (41) |
| No, never | 56 (11) | 347 (43) | 98 (46) | 90 (53) | 12 (20) | 71 (51) | 11 (9) | 41 (67) | 24 (49) |

literate audience. The media have also tended to portray breast cancer as a young white women's disease by predominantly using such women in their imagery and case studies. Worthy of note is that over one-third (38%, $n = 199$) of respondents from the general population sample had also received information from a breast cancer charity compared to only 16% ($n = 132$) of BME women, clearly demonstrating the failure of such charities' breast cancer awareness month campaigns to reach different BME groups.

The BME sample was more likely to report that their family and friends were one of the top three sources of information about breast awareness/breast cancer (55%, $n = 453$) compared to the general population sample (37%, $n = 192$). This may reflect the higher dependency on oral methods of communication and also the importance of the family in the dissemination of health knowledge and beliefs for BME groups (National Cancer Alliance, 2001; Randhawa and Owens, 2004).

### Dissemination

Looking forward at modes of dissemination that are likely to be successful in promoting the breast awareness message, the findings clearly demonstrate that primary care plays a major role in disseminating breast awareness information. When asked to select the top three places they would prefer to get health information from, primary care was overwhelmingly identified as the preferred choice by approximately 90% of the general population sample and overall BME sample group.

Other key sources included friends and family, and the media. Friends and family appeared slightly more favourable as a source of information among the BME sample (44%, $n = 358$) compared to the general population sample (35%, $n = 183$). Approximately 33% of respondents from both sample groups identified the media (TV/video/DVD/newspapers/magazines) as one of the top three places they would like to obtain health information from. The media are clearly an important medium for all population groups, highlighting the need for breast awareness information provided in the media to be accurate. More investigation is needed into the types of media most appropriate for different BME groups.

When the BME respondents were asked whether they would prefer to receive health information in English or their own language, approximately 75% of the Indian, Pakistani, Bangladeshi, black African and Chinese respondents stated that they would like health information to be available in their own language or in bilingual formats. Therefore, in order to improve breast awareness knowledge in BME groups, it is essential to make information available in different languages and formats.

## Discussion

This is the first study to investigate breast awareness knowledge and behaviours among women from the main BME groups in Britain. The study clearly demonstrates worrying disparities in knowledge and understanding of breast cancer, including signs and symptoms and possible risk factors, between women from different BME groups and the general population. Smaller studies among BME older adults (Fitch *et al*, 1997), South Asian people in Luton (Owens and Randhawa, 2004), Chinese people in Soho, London (Lees and Papadopoulos, 2004) and the Irish population in Britain (Scanlon *et al*, 2005) have reported similar disparities in levels of knowledge and awareness for cancer in general. This clearly is a major public health concern for healthcare services and the cancer charity sector.

In this study we found that having lower levels of knowledge and awareness of signs and symptoms, and risk factors of breast cancer was strongly associated with not practising breast awareness or 'being breast aware'. Combined, these factors could potentially impede the early detection of breast cancer and the overall survival for women from BME groups. This finding is particularly worrying since evidence suggests that the incidence of breast cancer among BME women in the UK is increasing, and for some second and third generations incidence is coming more in line with that of the indigenous white British population (Kumar *et al*, 2004). If healthcare services, breast cancer charities and the media continue to ignore these facts and do not deliver more inclusive breast cancer/breast awareness education campaigns that reach people from different ethnic and cultural backgrounds, we are clearly contributing to these inequalities in health.

### Access to the NHS breast screening programme

The results also highlight major inequalities in access to the NHS breast screening programme among the BME respondents, which could result in these women being diagnosed at a later stage of the disease and having poorer outcomes. These results add to a growing body of evidence that BME women do not take up screening invitations; this is particularly shown in studies among South Asian women (Tucker *et al*, 1991; Cohen *et al*, 1992; Lancaster and Elton, 1992; Kernohan, 1996). Some studies suggest this could be due to a lack of information available in different languages, and an absence of discussions about screening. Strategies to improve screening uptake among women from BME groups therefore need to be implemented in partnership with these communities and the voluntary sector. They should also incorporate the principle of the 'personalisation of support' as recommended in the new public health White Paper *Choosing Health* (Department of Health, 2004), which states that support should involve building information, support and services around people's lives so as to enable people to make healthy life choices. An example of such an approach has been to use community health educators from BME communities to deliver targeted outreach programmes (Kernohan, 1996; Chiu, 2003; CancerBACUP, 2004).

## Access to breast cancer and breast awareness information

These findings suggest that differences in levels of breast awareness could be related to inequalities in access to breast cancer or breast awareness information, and the failure of breast awareness campaigns to reach people from different ethnic and cultural backgrounds. Having some knowledge about the disease is important because it can help prevent misconceptions developing, and allay some potential fears by ensuring people are aware of the effectiveness of treatment and improvements in survival rates. In addition it can help ensure that people are aware of the importance of reporting symptoms early. The lack of cancer-related information in different languages or inappropriate formats has been reported by some as a potential barrier (Lodge, 2001; CancerBACUP, 2004), along with traditional health promotion strategies being primarily targeted at the majority white population (Lodge, 2001). The National Cancer Alliance also suggest that BME patients receive less information about their condition regardless of social class. Therefore, any breast cancer information strategy needs to disseminate information using a multi-medium approach, which reaches all groups and is available in a variety of different languages. Primary care evidently has a pivotal role to play in breast health promotion, as well as in promoting breast awareness behaviours and uptake of screening.

## Other possible explanations

We can only speculate here about other possible reasons for the disparities in breast cancer and breast awareness knowledge, and breast awareness practices among the BME female respondents. It clearly requires more qualitative research that explores variations in lay breast cancer health beliefs and perceptions of risk, and which explores potential socio-economic and sociocultural barriers to being breast aware. Navon (1999) also suggests that it is necessary to distinguish between the impact of cultural background versus a lack of knowledge concerning health behaviour.

## Policy relevance

Current public health policy in the UK emphasises the need to reduce inequalities in health and help individuals to choose healthier lifestyles to ensure better health for all (Scottish Executive Health Department, 2003; Department of Health, 2004; Welsh Assembly, 2005). The policies also emphasise the need for partnership working to improve health, in particular partnerships between statutory, voluntary and community organisations. This approach has been recognised as being very effective when engaging with groups who do not access traditional sources of advice on health (Department of Health, 2004). Following a decision to act on the findings of this study, Breast Cancer Care launched the 'Same Difference' campaign as part of Breast Cancer Awareness Month 2005. The campaign seeks to address inequalities in access to breast awareness information and to encourage everyone to be breast aware. The campaign calls for partnership working between the government health departments, primary care, the NHS screening programme, breast cancer charities, community organisations and the media, to develop a strategy for increasing breast awareness among people from diverse backgrounds.

This strategy will also encompass a user involvement approach as advocated by the *NHS Cancer Information Strategy* (NHS, 2000), National Cancer Alliance (2001) and CancerBACUP guidelines for health services in meeting the needs of BME communities (CancerBACUP, 2004).

Breast Cancer Care also believes that it is vital for the cancer registration system to improve its recording of ethnicity in order to collect more accurate information about cancer incidence and mortality among BME groups in the UK. Without this, health and social care services will not be equipped to meet the needs of different BME groups, and these communities will be ill informed of their risk.

## Strengths and limitations of the study

A key strength of this study is that it included a comparison sample of the general population, enabling us to detect both similarities and unique cultural differences in the responses between the groups. Although we feel this study provides a valuable first step in assessing breast awareness knowledge and behaviours among some of the main BME groups in Britain, further investigation is needed because of the limitations of this study's design and sampling approach.

The composition of the two sample groups differed slightly by age, social class and geographical region. This will have affected the research findings, and requires more detailed analysis to identify which of the findings are attributable primarily to ethnicity, age or socio-economic background. Also, by using different methods of data collection, such as face-to-face interviews and telephone interviews, we are unable to identify the extent to which interviewer bias affected the results. Overall, we feel this study would have benefited from a larger sample population and a more in-depth questionnaire.

## Conclusion

The findings of this study have shown significant disparities in levels of knowledge and awareness of breast cancer, breast awareness behaviours and uptake of breast screening between women from different BME groups and the general population in Britain. These disparities are further compounded by poorer access to breast cancer and breast awareness information among the BME sample. These findings contribute to inequalities in early detection for breast cancer and pose a major public health concern. The failure of cancer registries to record ethnicity effectively means that we are unable to assess the impact this may be having. Urgent action is needed to reduce inequalities in access to breast cancer and breast awareness information, and the NHS breast cancer screening programme for women from different ethnic and cultural backgrounds. Evidently, there is a need for more inclusive breast awareness campaigns that are relevant to everyone and that use a variety of methods to disseminate information. Where appropriate, these should be targeted to meet the specific information and cultural needs of different population groups. Breast Cancer Care believes that through developing partnerships between breast cancer charities, primary care, the screening programme, government health departments, community organisations and the media, we can implement a more co-ordinated and effective breast awareness campaign.

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## CONFLICTS OF INTEREST

None.

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