

GPs' perceptions and experiences of public awareness campaigns for cancer: a qualitative enquiry

Trish Green BA (Hons) PhD,* Karl Atkin BA (Hons) DPhil† and Una Macleod PhD FRCGP FHEA‡

*Research Fellow, Hull York Medical School, University of Hull, Hull, †Professor, Health Sciences, University of York, York, and ‡Professor, Primary Care, Hull York Medical School, University of Hull, Hull, UK

Correspondence

Trish Green BA (Hons) PhD
Research Fellow
SEDA Research Group
Hull York Medical School
University of Hull
Hertford Building
Cottingham Road
Hull HU6 7RX
UK
E-mail: trish.green@hyms.ac.uk

Accepted for publication

8 March 2015

Keywords: cancer awareness campaigns, cancer diagnosis, general practitioners, mass media, primary care, qualitative study

Abstract

Background Public awareness campaigns for cancer are used to alert the UK population to symptoms which, if experienced, should be discussed with their general practitioner (GP). More timely diagnosis of cancer is assumed possible if patients with the appropriate symptoms present to GPs and GPs recognise the need to act on these symptoms.

Objective To investigate GPs' perceptions and experiences of public awareness campaigns for cancer.

Methods Semi-structured interviews with 55 GPs from practices in the North and North East of England and Greater London. Interviews were recorded and transcribed verbatim. Repeated reading of GP transcripts engendered thematic analysis and co-coding ensured legitimacy of findings.

Results Participants supported the underpinning ethos of public health campaigns and articulated a commitment to engaging with patients with respect to cancer warning signs and symptoms despite the common perception that public awareness campaigns increased numbers of consultations. Tensions were evident with regard to increased demands on GP time and primary care resources during a period of major upheaval within the NHS. Concern was raised that some patients remain outwith the reach of campaign messages. The complexity of addressing how public health messages compete with other issues in people's lives was identified as challenging.

Conclusions General practitioners provided insight into why some members of the general public do not engage with public health messages. Public health/primary care interaction that incorporates GPs' knowledge of their patient populations could advance the search for solutions to a more robust approach to earlier cancer recognition and referral in primary care.

Introduction

Cancer remains one of the UK's biggest health issues, both in terms of morbidity and mortality. Because of this, there is increasing interest in how patients and professionals recognize cancer symptoms,¹ particularly since European data show that 1-year survival figures for many cancers are poorer in the UK than in comparable European countries.^{2,3} This suggests that some people in the UK are diagnosed at a later point in their cancer history than others in Europe⁴ leading to the question of why there should be this apparent delay in diagnosis.⁵ This has resulted in an increased interest in all stages of the patient pathway to diagnosis and, in terms of the NHS, response has focussed attention on general practitioners (GPs) due to their traditional gatekeeping role within the UK health system. The National Awareness and Early Diagnosis Initiative (NAEDI), launched in England as a partnership between the Department of Health (DH) and Cancer Research UK in 2008, recognized that timely cancer diagnosis is dependent both on patients taking symptoms to their GPs, and GPs recognizing the need to act on these symptoms. NAEDI thus sought to address both of these aspects in order to improve patient pathways to earlier diagnosis.

In the UK, patients usually present first to GPs with new potential cancer symptoms. These interactions are then the front line for contact between public/patient and the NHS with respect to the understanding of symptoms, stage at presentation and GP response.⁶ The context to this is challenging as the majority of patients who present to GPs with potential cancer symptoms have a diagnosis other than cancer.^{7,8} Moreover, recognition of potential cancer symptoms can be complex and might involve several GP appointments and investigations.⁶ Inherent uncertainties therefore underscore referral decisions in primary care.

So primary care has been identified as one arena wherein diagnostic delay might occur. The other key aspect of the pathway to diagnosis is the identification by patients that they have a bodily change for which they need to seek help. Awareness of many cancer symptoms is generally

low,⁹ and it is when these symptoms are particularly worrying or interfere with daily life that patients are most likely to present.⁷ There has therefore been considerable activity in England in particular in seeking to improve general awareness of cancer symptoms in order to reduce the overall pathway to diagnosis. This activity has included mass media campaigns in which promotion material did not just speak to symptoms people might be experiencing, but linked these symptoms with consultation through, for example, an image of a GP holding a sign that reads, 'just tell me'.¹⁰

Mass media and public health

The use of mass media techniques in public health initiatives is not new.¹¹ In the 1960s, the main avenues for such information were radio, television and the printed word. More recently, there has been an exponential increase in electronic media so that the vast majority of people in the UK have access to a plethora of health-related as well as other information, which is of variable quality and at times poorly supported.¹² Given the prevalence of such techniques as potential vehicles for change, these can prove fruitful for those who wish to promote a particular kind of product or, indeed, promote particular forms of knowledge.

Although advertising products for consumption differs in several ways from promoting health-related information, in recent years similar marketing techniques have been utilised in order to promote public health messages.^{13–15} Even though the evidence to support different interventions is limited, the Department of Health Cancer Reform Strategy is underpinned by behavioural science methodology which highlights tactics that might well be effective in changing people's behaviour including the systematic application of marketing concepts and techniques to achieve specific behavioural goals relevant to a social good.¹

There is, however, some evidence that suggests public health interventions can have the effect of widening health inequalities within and between patient populations, so these techniques are not without challenges or pitfalls.^{16,17} Capewell and Graham, for example, have argued

in relation to cardiovascular disease that ‘attention needs to be paid to how inequalities within disadvantaged groups can influence responses to population-wide interventions and their overall impacts’.¹⁷ Such a claim resonates with any attempt to change health-related behaviours.

In the application of these techniques to recognition of potential cancer symptoms, there are two ‘parties’ of interest: the person with a potential cancer symptom and the health-care practitioner (in England, generally a GP). However, although work to date has included a GP perspective in cancer-specific studies, there has been limited work investigating GPs’ own understanding of awareness and early detection.^{8,18} Our study aimed to address this gap. Of particular interest for us was to understand the ways in which individual GPs in England consider their role in public health terms (if indeed they do). Cancer symptom recognition might largely be an activity that happens in a consulting room between a patient and GP. But if the public health policy agenda is to be realized (that is, reduction in deaths from cancer in England), then primary care practitioners might need to engage more intimately with the public health agenda. An example of this is provided by Damery and colleagues¹⁹ whose study showed that when GPs endorsed public health drives for bowel cancer screening, patients complied. Our aim therefore was to find out how GP practice was affected by public health initiatives aimed at heightening the public’s awareness of cancer symptoms. Although data for our study were gathered in the midst of Be Clear on Cancer (BCoC) campaign activity, this was not intentional and this article presents GPs’ reflections on and impact of public health initiatives on their practice *per se*. (At the time of the study, results of the BCoC campaigns were unavailable; these can now be accessed via the Cancer Research UK website: www.cancerresearchuk.org).

Objectives

We aimed to explore how GPs perceived their role in the early detection of cancer and how this role could be maximized when considered

alongside heightened awareness of cancer symptoms within the public domain. Although some evaluations of the effectiveness of public health campaigns have been made from patients’ perspectives,²⁰ there is little known about GPs’ experiences of such initiatives. This article adds to these debates from a unique perspective as it offers insight from GPs regarding the impact of public health campaigns on both their patient populations and their own practice.

Method

Participants

Participants were drawn from practices in sixteen former Primary Care Trusts, eleven located in the north and north-east of England and five in Greater London. Recruitment was enabled by colleagues in local Primary Care Research Networks (PCRNs), who contacted practices on our behalf with study details. GPs were asked to return an expression of interest form to the research team if they wished to participate. Interested GPs were then contacted by the researcher. As we were keen to achieve maximum variation across the geographical spread of our study, it was decided that all GPs who responded to our call should be interviewed. In all, 55 GPs from 43 practices participated (31 practices in the north and the north-east, 12 in Greater London). While this is larger than many qualitative studies, we were keen to get a variation in experience and location (in particular including London as well as a mix of urban and rural practices in the north) and so the sample size helped capture the heterogeneity of this professional group: four GP Cancer Leads, seven GPs with a special interest in cancer, five senior partners, 30 partners, two junior partners, 12 salaried GPs, two single-handed GPs. Number of years since qualifying ranged from <1 to 39 years. Thirty-two male and 23 female GPs participated (see Box 1).

Practice demographics

We accessed the National General Practice Profiles (NGPP) and attributed deprivation

Box 1 GP demographics

Participant	Years in practice	Position	Participant	Years in practice	Position
GP1/F/4	6	Salaried	GP29/F/10	11	Partner/SI Cancer
GP2/M/3	26	Senior Partner/SI Cancer	GP30/M/10	20	Senior partner
GP3/M/6	26	Junior Partner	GP31/M/10	25	Partner
GP4/M/8	27	Partner	GP32/M/3	5	Partner
GP5/F/2	25	Partner/SI Cancer	GP33/M/6	24	Partner
GP6/M/2	27	Partner/SI Cancer	GP34/M/1	6	Partner
GP7/M/7	22	Partner	GP35/F/8	24	Single-handed
GP8/M/5	20	Partner	GP36/M/7	26	Partner
GP9/M/7	6	Salaried GP	GP37/F/4	2	Salaried
GP10/M/4	9	Single-handed	GP38/F/8	10	Salaried
GP11/M/7	14	Salaried	GP39/M/8	26	Senior partner
GP12/F/7	6	Partner	GP40/M/8	10	Junior partner
GP13/M/5	3	Partner	GP41/M/1	16	Partner
GP14/F/10	19	Partner/SI Cancer	GP42/F/8	19	Partner
GP15/F/3	27	Partner/SI Cancer	GP43/M/8	15	Partner
GP16/M/8	7	Partner/SI Cancer	GP44/F/8	11	Partner
GP17/M/9	39	Partner	GP45/F/1	1	Salaried
GP18/M/9	9	Salaried	GP46/M/10	27	Senior partner
GP19/M/9	25	Partner	GP47/F/10	15	Salaried
GP20/M/3	13	Partner	GP48/M/8	21	Senior partner
GP21/F/6	7	Salaried	GP49/F/8	13	Partner
GP22/M/7	13	Salaried	GP50/F/6	9	Partner
GP23/F/9	23	Partner	GP51/M/9	5	Partner
GP24/F/5	25	Partner	GP52/F/3	32	Cancer Lead
GP25/F/9	8	Salaried	GP53/M/2	13	Cancer Lead
GP26/F/4	23	Partner	GP54/M/3	18	Cancer Lead
GP27/F/5	10	Salaried	GP55/F/9	14	Cancer Lead
GP28/F/10	39	Partner			

scores to our sample practices.²¹ These range from 1 to 10, where 1 signifies the highest level of deprivation and 10 represents the lowest; in the practices we visited, 20 were in the 1–5 range and 23 were in the 6–10 range. The ethnic make-up of patient populations in the north and north-east practices was predominantly White British. In Greater London, all practices had higher numbers of ethnic minority patients than their northern counterparts in deciles across all levels of deprivation and affluence.

Data collection

In-depth semi-structured interviews were conducted between May 2012 and April 2013. All

interviews were conducted by the first author, were digitally recorded (with interviewee permission) and professionally transcribed verbatim. A topic guide was used to explore the GP role in early detection, the role of primary care with respect to cancer awareness, the role of GPs with respect to cancer screening and NHS changes. Each topic entailed a series of open-ended probes. Interviews lasted between 50 and 75 min. To contextualize the fieldwork, during data collection, several local and national public health campaigns for cancer were on-going, alongside major changes to the infrastructure of primary care and the GP remit. The Health and Social Care Act (HSCA) was implemented in 2012, towards the end of our data collection phase.

Data analysis

We utilized a systematic approach to data analysis, engaging detailed familiarization, identification and indexing of key themes, contextualizing of themes in relation to the framework of cancer diagnosis in primary care, and interpreting these within the context of theoretical themes relevant to the interview material. Thematic analysis explored relationships between patterns, categories and descriptive themes²² that were interrogated in relation to each individual account as a means of understanding a particular perspective. Cases were compared to highlight potential similarities and differences and were related to characteristics of the respondent that could be reasonably justified as an explanation that mediated experience, such as role, demography of practice, experience.²³ This involved understanding the meaning of actions, beliefs, attitudes and views from the range and frequency of participants' narratives as well as consistent cross-referencing. We adopted an iterative approach, whereby themes were identified and fed back into the data collection process. This method of moving between formulating theory and analysing data facilitated better understanding of the GP role in early cancer diagnosis and enabled patterns of views and perceptions to be identified and comparisons made, as well as contradictions in views to be explored. Data were uploaded to *NVivo 10*, enabling development of a coding framework that facilitated data retrieval and comparative analysis. Records of data collection and analysis were kept at all stages.

Ethical approval

The study was submitted to the Hull York Medical School Ethics Committee for ethical approval and via the Integrated Research Ethics Service to the relevant NHS R&D departments. The main ethical issues related to confidentiality of participants and to storage of data. Participants were assured on the issue of confidentiality, and all data are anonymized accordingly and stored securely. Pseudonymization illustrates the order that the interviews

were conducted, GP gender and the practice deprivation score.

Findings

Due to their gatekeeping role, GPs in England are at the front line when it comes to cancer symptom recognition and referral and during the data collection phase for this study, cancer awareness campaign materials endorsed the GP to the general public as their first port of call.¹⁰ Findings from our interviews with GPs revealed that such initiatives increased the numbers of patients presenting to them. Although this is a desired effect of campaign activity, our analysis revealed that GPs bear the brunt of such initiatives with increased numbers of consultations with 'worried well' patients. While GPs took every opportunity to educate and inform their patients of the signs and symptoms of cancer, they expressed some tension and anxiety in terms of competing demands on their time and their role in promoting health and educating their patients. Participants also perceived that campaign messages did not always reach as widely as they should.

The inclusion of GPs in cancer awareness campaigns

The figure of the GP is prominent in recent public health initiatives aimed at raising awareness of cancer symptoms in the public domain, where members of the public are urged to visit their GP if certain symptoms manifest. GPs' awareness of this was apparent in the interviews:

The bottom line on all the campaigns is, if you're worried go to your GP, aren't they? So we are first stop, so, you know, it's going to be us. (GP25/M/9)

For the most part, GPs were keen to support campaign initiatives, but there was a general unease at an apparent lack of dialogue from public health colleagues prior to campaigns and several participants told us they found out about campaigns through the same means as the general public:

If at the outset that was put out as being, you know, these are the benefits, these are the costs

but it, we see it and still feel it's the right thing to do, you're much more likely to have us on side. (GP2/M/2)

It's nice as a GP to reinforce the public health campaign, erm, and that legitimises it with patients [but] the cough campaign came out without any notification to GPs really. Hadn't caught up that that was going on, that it was on the buses and, and in other places and on the telly, ooh that's why everybody's coming in with their cough. (GP35/F/8)

Although efforts are made on behalf of campaign organizers to inform key stakeholders of public health initiatives (pers. comm., NHS England), several GPs explained how this kind of information competes on a daily basis with other demands on their time, which might explain why some of our participants had not been aware of campaign activities prior to their patients' visits:

We get so many bits of paper, like this morning alone I've had, I don't know what, ten emails? Some of which have got attachments that are running to pages and pages and pages, and that's, you know, that's on top of the surgery and me looking up stuff. Something's got to give, this morning it's been those emails so, there might have been something really important in them. (GP5/F/2)

GPs also expressed anxiety with regard to changes within the NHS and primary care more specifically, that were on-going throughout the data collection phase of our study. GPs experienced an increase to their workload that resulted in competing demands on resources:

Stuff gets dropped by other organisations or dumped onto us but, we, and we have to pick up the slack, but actually we have no resources to do it, and because we are at the coalface dealing with the people, that's a real challenge. (GP2/M/3)

Raised public awareness and its impact on GP practice

Although GPs talked about an increase in their workload, the majority were supportive of public health initiatives. Their perception was, however, that campaign organizers had not

considered the reverberations their activities might have on primary care with regard to increased numbers of consultations and the effect of these on time and resources. The majority of participants also stated that extra consultations were predominantly with patients they collectively termed 'the worried well'. So, and although there was consensus that awareness of cancer symptoms among the public had increased, due in part to public health initiatives, there was also unanimity that campaign messages often missed their target audience:

The trouble with the media campaigns is that it's predominantly the worried well that respond to them. (GP16/M/8)

It makes the haystack bigger, because more people come and they've nothing wrong with them. (GP36/M/7)

Lots of x-rays were done which were not necessary. (GP30/M/10)

Although campaign discourse legitimizes patients' appointments with their GPs, study participants told us that further investigations were mostly unnecessary because patients' symptoms did not raise the GP's alarm; it was then left to the GP to convey this information to patients in an acceptable way. In some instances, GPs said they ran tests to reassure their patients, rather than because patients' symptoms warranted such action. Although overall participants accepted that increased consultations were an inevitable result of increased information in the public domain, some also raised some serious negative consequences of this situation:

There's a danger that if we get so many people coming in saying, oh I've got, you know, they, I've been seeing the advert and my poo's changed a bit, then we'll just get, you know, the danger that we will develop a negative response to that, think, ah not another one, you know, you will then miss the one that really is. (GP39/M/8)

Anxiety was also raised with regard to patients who might present 'too early', that is, before symptoms had manifested sufficiently to raise the GP's suspicion of cancer:

I can see that, that there's going to be, a number of people who will come inappropriately early as a result of it and you've got to try and work that out as a GP, from people who are coming with, with something genuine that are presenting a little bit earlier, and the earlier you present the harder it is for us to make the right diagnosis, and the slight concern is that if you come too early you might then get put off coming back again. (GP33/M/6)

The skill of general practice is the fact that we see patients very early in their illness process and it's trying to pick the ones out that are going to not resolve, and these early non-specific symptoms are actually a problem. (GP48/M/8)

Participants therefore identified the importance of encouraging the 'right' patients to present and, ultimately, for GPs to respond appropriately:

The only way patients will present is if they think they think they've got symptoms that are worrying, the only way they'll know that they're worrying symptoms is if we educate them about them. (GP1/F/4)

As part of the safety netting, er, we, we use that kind of, er, awareness anyway, so for example if, if a lady comes with the three weeks cough, we explain to them, if you have a cancer, these are the possible other symptoms what would expect you to have, and then if, if you have any of these symptoms we want to see you straight back. (GP9/M/7)

Help-seeking by patients

Although participants perceived that the awareness of cancer signs and symptoms had increased within the public domain, they also observed that such information was received and enacted upon differently by different groups and individuals within the population. Respondents were concerned about a number of population groups including the poor, men, the 'stoic elderly', people with mental health issues, people with drug- or alcohol-related problems, people with learning disabilities, people with English as a second language, black and ethnic minority patients. These were in addition to some broader factors such as education levels, employment status and housing. GPs considered these groups and individuals to be the least

likely to request or receive timely health care more generally, to put off their help-seeking and to be the least likely to be nudged by public health discourse:²⁴

There's a real fatalistic attitude amongst a lot of people that they see, sometimes see illness as inevitable because of, because they're seeing it around them, you know, their family smoke, drink heavily, family, you know, their parents might, might be having COPD at an early age, they, they see it as a sort of progressive thing. People round here have very hard lives and I think sometimes that prevention agenda becomes, it's just not so important for them. (GP41/M/2)

Unfortunately it tends to be, you know, the kind of middle class, erm, professional people who are, who are, you know, more demanding generally. The patients I see, the ones who push for referral, it's not the, you know, Bengali man in his seventies who maybe only speaks a little bit of English. (GP26/F/4)

Our data clearly demonstrate GPs' perceptions of the patients most at risk of a more prolonged pathway to diagnosis.

Primary care and public health – towards interactive practice

We explored GPs understanding and views of their own role within the public health agenda. Although there were some examples of GP/practice involvement in community outreach-type activities, these were in the minority. Overall, GPs felt their place was in the surgery, a model of practice that relies on patients presenting to primary care in the first instance, which is the aim of public health campaigns:

It's always going to be, or it's likely to always be, patients come to you with symptoms which you hopefully are picking up on as potential, erm, signs of cancer. I don't think it's, it, well it certainly currently isn't a kind of screening thing where we would go into a church hall and erm, and ask people questions relevant to cancer... it's reactive rather than proactive, in terms of our approach. (GP2/M/3)

I think if we were clear of what we were trying to do and how to do it then We would be very happy to go with, along with a campaign, where we are

at the moment doesn't feel as though this practice is about to mount single-handedly any sort of proactive checks for our patients. (GP15/F/3)

Equally important to consider then is how GPs engage with patients about symptom awareness when they do present, be this instigated by campaign messages or self-motivation. Some like GP2, quoted above, described the approach of general practice as reactive, others demonstrated a more proactive approach.

Despite increased numbers of consultations, for example, GPs perceived the situation as an opportunity to provide advice and education. They described how they would explain which signs and symptoms to be mindful of as well as couching such conversations in terms that would encourage patients to re-present. Data thus demonstrate how participants made efforts to safety-net patients who responded to campaign advice and perceived their role to be educational. In so doing, they took a proactive stance on public health, albeit confined to the four walls of their surgery:

In our day to day conversations with patients, obviously, you know, try to, erm, you know, encourage people to return back and if their symptoms don't settle or, you know, use the word cancer or, you know. So, so as if it's a normal thing that they should be, can be, you know, talking about and, and it's not an issue for us, so I think those are the things in a sense we can do, but I would say that's sort of just general communication. (GP4/M/8)

I'll chuck preventative things into, into the consultations, smoking, alcohol, weight, erm, certainly where I practice is, is always relevant, erm. (GP33/M/3)

More of what we do is about health promotion so I'd see more of myself a role about behaviour modification, behavioural change, which helps reduce someone's risk of developing cancer, I can't say I've ever discussed what symptoms, you know, to be alerted for, it doesn't naturally flow into what you're doing and I, I would see a much bigger role about, about behavioural change. [...] And also that cancer is only a small part of what's in those things, and they cause a lot of other morbidity and illness as well. (GP41/M/1)

Discussion and conclusion

The majority of GPs in England will encounter a cancer diagnosis quite rarely in comparison with the numbers of symptoms patients might present with that could be suggestive of the disease.⁵ Detecting cancer therefore takes up much GP time.²⁵ There is some evidence to indicate that time to diagnosis can be reduced by involving both patients and GPs in any awareness raising activity, so that both are primed to act¹⁸ and as we have demonstrated, GP inclusion was evident in public health campaigns on-going at the time of our study. As our data show, GPs possess in-depth knowledge of their patients and as such are able to specify which groups and individuals are most at risk of receiving later diagnoses of cancer.^{26,27} It is right, therefore, that public health initiatives continue to encourage members of the general public to consult primary care if worrying symptoms manifest. However, although policy discourse constructs mass media techniques as effective methods of promoting health information to the public,^{1,28-30} analysis of our data demonstrates that the ways in which such information was received and interpreted differed across individual patients and patient populations.

Overall, our findings reflect the challenge that English general practice faces in dealing with all the demands made of it at a time of major upheaval and change within the NHS. We have examined GPs' attitudes to awareness and early diagnosis, including the extent to which prompt presentation with symptoms is welcomed on the one hand, while on the other considered to be a 'worried well' burden on primary care resources. Participants supported the underpinning ethos of public health campaigns and articulated a commitment to patient 'safety netting' and to educating patients around cancer warning signs and symptoms, perceiving this to be their contribution to the public health agenda. That campaign messages encourage patients to visit their GPs was therefore seen as advantageous in many respects by all of the GPs we interviewed. Consultation

skills emerged from our data as a major strength of general practice; encouraging patients to present worrying symptoms to their GP is, therefore, a public health imperative. However, a clear message from our participants is that adequate time and resources are necessary to enable GPs to fulfil this part of their role effectively and in their patients' best interests. Our findings suggest that meaningful interaction between primary care and public health is vital if future campaigns are to be successful in their quest for the earlier diagnosis of cancer for increased numbers of patients.

Strengths and limitations of the study

This study offers unique insights into the efficacy of public awareness campaigns for cancer from the perspective of GPs. We believe it is the first study to offer such a perspective. One of its strengths is in the numbers of GPs who responded to our invitation for interview (despite a common narrative that GPs are a challenging group to involve in research of this type), which indicates the importance of this topic for primary care professionals. Although data presented here are drawn from a larger than average cohort for a qualitative study, as with all qualitative research, the findings are not generalizable and we have to acknowledge that our interview respondents reflect those interested enough in the topic to give us an hour of their time, and so may be those with particularly strong views on the topic.

Implications for policy, practice and research

Despite carrying the burden of increased consultations from 'worried well' patients and expressing limitations to the amount of dialogue between themselves and campaign instigators, the majority of GPs who participated in our study supported public health cancer awareness initiatives. They perceived their own place in this endeavour to be within the confines of their surgery in one-to-one interactions with their patients and, as such, were supportive of drives to increase public knowledge.

However, our data also demonstrate participants' perceptions that public health campaigns do not always reach as widely as they might. Clearly, GPs' understandings of their patient populations could provide a rich source of information in this regard, which in turn suggests that dialogue between primary care and public health professionals is integral to successful campaigns. It would require further research to explore whether, over time, GPs perceived that those campaign messages broadcast at the time of our study had not only reached their desired audiences, but were also understood and embedded within the public domain. This would also require research with the general public. Moreover, the possibility raised by study participants that increased numbers of patients presenting to primary care on the back of campaign messages might result in missed cancers is worthy of further exploration.

At the time of the study, there were no results available from the BCoC campaigns. However, it should be noted that our results do not constitute a critique of these initiatives, but reflect GPs' perceptions of their role in the process of cancer awareness campaigns generally. In campaigns aimed at prevention or earlier diagnosis through behavioural change, the costs in terms of increased call on clinical resources, often primary care resources, are observed first; any benefits do not emerge until later. The results here suggest that there is a clear need for primary care practitioners to be made aware of the results of campaigns in terms of cancer diagnoses and stage at diagnosis, so that they see the benefits as well as the costs. Publication of the results of campaigns such as BCoC in the peer-reviewed medical literature would be a major step forward.

Conclusions

Although participants perceived that their primacy as the first port of call for patients with suspected cancer symptoms should continue, this aspect of their role was experienced as more difficult due to increased responsibility

for resource management and the impact of this on their decision making, particularly when campaign discourse resulted in ‘worried well’ members of the public taking up already stretched GP time. In terms of GP engagement with the public health agenda, our analysis would suggest that GPs are fulfilling their side of the bargain. It remains the task of public health to fulfil theirs by continuing to raise awareness of cancer symptoms among the general public and to encourage the ‘right’ people to visit their GPs.

Acknowledgements

The research team acknowledges the support of the Primary Care Research Network in identifying participants. We thank all of the GPs who participated in the study and Christine Taylor for her transcription skills. We are grateful to Dr Julie Seymour, Hull York Medical School, for helpful comments on an earlier draft of the manuscript. We acknowledge the support of Claire Ward, Hull York Medical School, for exemplary administrative assistance.

Sources of funding

Trish Green is funded by the Policy Research Unit in Cancer Awareness, Screening and Early Diagnosis. This Unit receives funding for a research programme from the Department of Health Policy Research Programme. It is a collaboration between researchers from seven institutions (Queen Mary University of London, UCL, King’s College London, London School of Hygiene and Tropical Medicine, Hull York Medical School, Durham University and Peninsula Medical School).

Conflict of interest

There is no conflict of interest.

References

- 1 Department of Health. *Cancer Reform Strategy*. London: Department of Health, 2007.

- 2 Verdecchia A, Francisci S, Brenner H *et al*. Recent cancer survival in Europe: a 2000–2002 period analysis of EURO-CARE-4 data. *Lancet Oncology*, 2007; **8**: 784–796.
- 3 Coleman MP, Forman D, Bryant H *et al*. Cancer survival in Australia, Canada, Denmark, Norway, Sweden, and the UK, 1995–2007 (the International Cancer Benchmarking Partnership): an analysis of population-based cancer registry data. *Lancet*, 2011; **377**: 127–138.
- 4 Round T, Steed L, Shankleman J, Bourke L, Risi L. Primary care delays in diagnosing cancer: what is causing it and what can we do about it? *Journal of the Royal Society of Medicine*, 2013; **106**: 437–440.
- 5 Richards MA. The size of the prize for earlier diagnosis of cancer in England. *British Journal of Cancer*, 2009; **101**: S125–S129.
- 6 Walter F, Webster A, Scott S, Emery J. The Andersen Model of Total Patient Delay: a systematic review of its application in cancer diagnosis. *Journal of Health Service Research Policy*, 2012; **17**: 110–118.
- 7 Macleod U, Mitchell ED, Burgess C, Macdonald S, Ramirez AJ. Risk factors for delayed presentation and referral of symptomatic cancer: evidence for common cancers. *British Journal of Cancer*, 2009; **101**: S92–S101.
- 8 Jensen H, Tørring ML, Olesen F, Overgaard J, Vedsted P. Cancer suspicion in general practice, urgent referral and time to diagnosis: a population-based GP survey and registry study. *BMC Cancer*, 2014; **14**: 636.
- 9 Robb K, Stubbings S, Ramirez A *et al*. Public awareness of cancer in Britain: a population-based survey of adults. *British Journal of Cancer*, 2009; **101**: S18–S23.
- 10 Bethune R, Marshall MJ, Mitchell SJ *et al*. Did the ‘Be Clear on Bowel Cancer’ public awareness campaign pilot result in a higher rate of cancer detection? *Postgrad Medical Journal*, 2013; **89**: 390–393.
- 11 Toon E. “Cancer as the General Population Knows It”: knowledge, Fear, and Lay Education in 1950s Britain. *Bulletin of Historical Medicine*, 2007; **81**: 116–138.
- 12 Han PKJ, Lehman TC, Massett H, Lee SJ, Klein WM, Freedman AN. Conceptual problems in laypersons’ understanding of individualized cancer risk: a qualitative study. *Health Expectations*, 2008; **12**: 4–17.
- 13 Truss A, Marshall R, Blair-Stevens C. A history of social marketing. In: French J (ed.) *Social Marketing and Public Health: Theory and Practice*. Oxford: University of Oxford, Oxford University Press, 2010: 19–28.

- 14 Lupton D. *Revolted Bodies: The Pedagogy of Disgust in Public Health Campaigns*, Sydney Health & Society Group Working Paper No. 3. University of Sydney: Sydney Health & Society Group, 2013.
- 15 Wakefield MS, Loken B, Hornik RC. Use of mass media campaigns to change health behaviour. *Lancet*, 2010; **376**: 1261–1271.
- 16 Lorenc T, Petticrew M, Welch V, Tugwell P. What types of interventions generate inequalities? Evidence from systematic reviews. *Journal of Epidemiological Community Health*, 2013; **67**: 190–193.
- 17 Capewell S, Graham H. Will cardiovascular disease prevention widen health inequalities? *PLoS Medicine*, 2010; **7**: e1000320.
- 18 Daly H, Collins C. Barriers to early diagnosis of cancer in primary care: a needs assessment of GPs. *Irish Medical Journal*, 2007; **100**: 625–627.
- 19 Damery S, Smith S, Clements A *et al.* Evaluating the effectiveness of GP endorsement on increasing participation in the NHS Bowel Cancer Screening Programme in England: study protocol for a randomized controlled trial. *Trials*, 2012; **13**: 18.
- 20 Autstoker J, Bankhead C, Forbes LJ *et al.* Interventions to promote cancer awareness and early presentation: a systematic review. *British Journal of Cancer*, 2009; **101**: S31–S39.
- 21 National General Practice Profiles (NGPP). <http://fingertips.phe.org.uk/profile/general-practice/data#mod,2,pyr,2013,pat,19,par,E38000085,are,Y02748,sid1,2000005,ind1,-,sid2,-,ind2>, accessed 30 May 2014.
- 22 Brewer JD. *Ethnography*. Buckingham: Open University Press, 2000.
- 23 Silverman D. *Doing Qualitative Research: A Practical Handbook*. London: SAGE, 2009.
- 24 Marteau M, Ogilvie D, Roland M, Suhreke M, Kelly MP. Judging nudging: can nudging improve population health? *British Medical Journal*, 2011; **342**: d228.
- 25 Green T, Atkin K, Macleod U. Cancer detection in primary care: insights from General Practitioners. *British Journal of Cancer NAEDI Supplement*, doi: 10.1038/bjc.2015.41 (in press).
- 26 Forrest LF, White M, Rubin G, Adams J. The effect of socioeconomic inequalities in receipt of, and time to, treatment in lung cancer survival: an observational, data-linkage study. *Lancet*, 2013; **382**: S37.
- 27 Nicolson D, Macleod U, Weller D. Disparities in cancer outcomes: a UK perspective. In: Bowen DJ, Denis GV, Berger NA (Eds.) *Impact of Energy Balance on Cancer Disparities*. Switzerland: Springer, 2014: 19–36.
- 28 Public Health England Marketing Strategy. Public Health England, 2014. Available at: <http://www.rcgp.org.uk/policy/rcgp-policy-areas/health-inequalities.aspx>; <https://gen.civilservice.gov.uk/blog/2014/07/04/public-health-england-marketing-strategy-2014-17/>, accessed 22 October 2014.
- 29 Department of Health. *Improving Outcomes: A Strategy for Cancer*. London: Department of Health, 2011.
- 30 National Institute for Health and Clinical Care Excellence (NICE). Behaviour change: the principles for effective interventions, 2007, NICE Public Health Guidance 6, accessed 8 September 2014.