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The Wandsworth Oesophago-Gastric Cancer Symptom Awareness Pilot Project

D Thomas[1],Deedat S[1], J Raker[2],J-Y Kang[2], A Cranston[1],A Poullis[2]

1 Public Health Department, Wandsworth Borough Council, London
2 Department of Gastroenterology, St George's Hospital, London

Corresponding author:
Andrew Poullis

Andrew.Poullis@stgeorges.nhs.uk

St George's Hospital, London, UK

Tel: 020 8725 3811

Abstract

Background: Oesophago-gastric (OG) cancer has a poor five-year survival. Wandsworth Public Health Department undertook a direct mail-out to raise awareness of OG cancer, highlighting symptoms and risk factors with the aim of improving survival.

Objectives: To ascertain the impact of the mail-out on respondents awareness of OG cancer and intention to make lifestyle changes and assess acceptability of the information.

Method: 5,048 men aged over 55 years in Wandsworth, London, were sent a direct mail containing a leaflet explaining the signs and symptoms of OG cancer and a flyer about lifestyle factors associated with cancer. A postal survey was then sent to assess recall of key health promotion messages and self-reported changes in knowledge, attitude and behaviour in relation to OG Cancer.

Results: A response rate of 10.5% was achieved. 68.8% respondents were interested in the information and only 11.2% were made to feel uncomfortable and 6.8% made to feel worried. Most respondents recognised the key messages (Spotting the signs and symptoms of cancer (75.8%); Finding cancer early can save lives (73.5%); See your GP if you have a symptom (69.1%)). Almost 9% of respondents reported consulting their General Practitioner after receiving the leaflet. The survey suggested the mail-out had raised awareness of OG cancer as 50% of respondents reported talking to friends and family and/or intended to make lifestyle changes.

Conclusions: OG cancer awareness information by direct mail-out has shown acceptability with target recipients and a positive effect with respondents seeking advice from healthcare professionals and evidence of raised awareness of OG cancer.

Keywords: Cancer; Oesophageal; Gastric; Mail-out; Awareness

Introduction

There are 8,500 new cases of oesophageal cancer and 7,000 new cases of gastric cancer diagnosed each year in the United Kingdom (UK) [1]. Risk factors include older age, male gender, low socio-economic status, alcohol, cigarette smoking and *Helicobacter pylori* infection. The poor five-year survival of 15% for oesophageal cancer and 20% for gastric cancer [1] is mainly related to late presentation, since upper gastrointestinal cancer is largely asymptomatic in the early stages. The UK mortality rate for oesophageal cancer of 12 deaths per 100,000 is highest in Europe [2].

The Government committed to improving outcomes for patients with cancer and aimed to save an additional 5,000 lives by 2014/15. Early diagnosis is recognised as a key element in the drive to improve outcomes and the National Awareness and Early Diagnosis Initiative (NADI) has been set up to address this

challenge. As part of this the "Be Clear on Cancer" brand was created and has been in use since 2011 for bowel, breast and lung cancer. The aim of this campaign is to raise awareness of the symptoms of cancer amongst the general public to improve cancer survival rates by encouraging early presentation to primary care and consequently earlier diagnosis. Campaigns to date have involved television, radio, print advertising and face to face events.

The Bowel Cancer Campaign pilot in 2011 increased the number of people visiting their General Practitioners with symptoms by 48%, had high campaign recognition of 75% and had overwhelming support, with 96% of the public believing it was important [3].

Since April 2012 the "Be Clear on Cancer" campaign was extended to include seven projects focusing on oesophago-gastric cancer, one of which was in Wandsworth. Cancer is the leading cause of death in those under 75 in this large South West London borough and between 2005 and 2009 the cancer mortality rate was significantly higher than for England in this age group [4].

The Wandsworth Public Health Department received funding to deliver an oesophago-gastric cancer awareness pilot project and used this for a direct mail awareness campaign. This approach offers the ability to reach a large proportion of the target audience and is potentially cost effective. The campaign aimed to raise awareness of oesophago-gastric cancer in men over the age of 55 and encouraged them to see their doctor if they had difficulty swallowing or indigestion or heartburn for 3 weeks or more [5]. It highlighted risk factors for these cancers and provided information on the range of lifestyle services that may reduce the risk of developing cancer, including smoking cessation, weight management and alcohol reduction services.

The objectives of the study were:

- Determine the extent to which the target/respondent population took note of the cancer awareness message.
- Determine the intention of target/respondent population to make lifestyle changes as a result of the information supplied.
- Assess the suitability of a direct mail approach for improving cancer awareness.

Methods

In total 5,048 men were included in the study, accounting for an estimated 22.6% of the resident male population aged 55 years and older [6]. Of these, 50% were comprised of males aged over 55 years identified by their postcode as residing in areas of high socio-economic deprivation based on the top two quintiles of the index of multiple deprivation. The remaining men were aged 55 years and over but not identified as residing in a deprived area.

All those included in the sample frame were sent direct cancer awareness mail over a two-week period in June 2012. The mail included a cover letter explaining the purpose of the campaign, including the signs and symptoms of oesophago-gastric cancer and what to do with any concerns about their health; a "Be Clear on Cancer" leaflet further explaining the signs and symptoms of oesophago-gastric cancer (Appendix 1); and an A4 flyer explaining the link between unhealthy lifestyles and upper gastrointestinal cancer with contact details of healthy living services in Wandsworth. The project steering group, with support and guidance from Cancer Research UK, developed the covering letter and flier. Corporate Culture, who was commissioned by the Department of Health, produced the "Be Clear on Cancer" leaflet centrally.

A follow up survey was sent two weeks after the mail-out had been sent (Appendix 2). The survey sought to ascertain: patient demographics including age, gender, ethnicity and postcode (as an indicator of socio-economic status); recall of receiving the information and whether it had been read; reasons for not reading the mail out, if applicable; recognition of the key messages of the leaflet; whether the respondents were interested in the leaflet and their emotional reaction to it, which was categorised as comfortable, uncomfortable or worried; knowledge of oesophago-gastric cancer prior to receiving the leaflet; action taken after receiving leaflet; and whether the person would like further information about cancer in future and if so, how.

Formal ethical approval was not required according to the UK National Research Ethics Service [7]. All data was gathered confidentially and stored securely in line with NHS data management guidelines.

Results

Response rate

19.9% (n = 1,006) of surveys were returned. In 301 of these, the respondent did not recall receiving the mail out so only demographic data was collected and were omitted from this analysis. A further 115 respondents stated they were less than 55 years old or did not record a gender and therefore were also omitted from the analysis. Then a further 62 respondents did recall receiving the mail out but did not read it. This left a total of 528 respondents, for the main analysis, giving a response rate of 10.5%. The two commonest reasons for not reading the material being "it was not relevant to me" and "I thought it was junk mail" (40.4% and 24.6%).

Respondent demographics

Respondents were predominantly aged 65 to 74 years (40%) with 32% aged 55 to 64 years and 27% aged 75 years or over. Forty-three percent of respondents were from Index of Multiple Deprivation 2010 quintiles 4 and 5, the most deprived areas [8]. Response rates were similar across the five quintiles, ranging from 8 to 11%. The majority of respondents (67.6%) were from white ethnicity groups, 15% were from mixed and black ethnic minority groups and 17% did not state their ethnicity.

Acceptability of the mail-out

The majority of respondents were interested in the mail-out (69%). Overall more respondents felt comfortable with the information given in the mail-out than uncomfortable or worried (Table 1). Similar emotional responses were seen across age groups and deprivation quintiles but there were differences between ethnic groups (Table 1). A greater proportion of mixed

Table1 Emotional response to mail out for all respondents and by ethnic group, age and socioeconomic deprivation.

Groups	Comfortable n (%)	Uncomfortable n (%)	Worried n (%)
All Respondents (n = 528)	173 (32.8)	59 (11.2)	36 (6.8)
Ethnic Groups			
White(n = 357)	106 (29.7)	41 (11.5)	20 (5.6)
Mixed and BME(n = 80)	42 (52.5)	7 (8.8)	10 (12.5)
Not stated(n = 91)	28 (30.1)	11 (12.1)	6 (6.6)
Age Groups (years)			
55 – 64(n = 170)	51 (30.0)	17 (10.0)	16 (9.4)
65 – 74(n = 213)	73 (34.3)	23 (10.8)	11 (5.2)
≥ 75(n = 145)	43 (29.7)	16 (11.0)	5 (3.4)
Socioeconomic Groups			
Quintile 1 -3(n = 227)	81 (35.7)	28 (12.3)	22 (9.7)
Quintile 4 – 5(n = 256)	77 (30.1)	27 (10.5)	12 (4.7)
Not stated (n = 45)	15 (33.3)	8 (17.8)	5 (11.1)

and black minority ethnicity groups were comfortable but also worried by the information in comparison to white ethnicity groups.

Knowledge of oesophago-gastric cancer

Knowing "nothing" about oeosophago-gastric cancer prior to receiving the leaflet was reported by 38.4% respondents, whilst 9.5% reported they knew "a lot" and 52.1% "a little". Reporting knowing "nothing" about oeosophago-gastric cancer prior to receiving the leaflet was more frequent in those aged 55 to 64 years, those living in more affluent areas (IMD quintiles 1 to 3) and in ethnic minority groups (data not shown).

The majority of respondents recognised that the key messages of the leaflet were to spot the signs and symptoms of cancer (75.8%), that finding cancer early saves lives (73.5%) and to consult a GP if symptoms are noted (69.1%). A lower proportion, of respondents thought that reducing cancer risk through healthier living was a key message (49.8%).

Actions taken after receiving the leaflet

A small proportion of respondents reported making an appointment with their General Practitioner or speaking with their local pharmacist after receiving the leaflet (Table 2). Respondents indicated the mail-out had started to make them think about OG cancer with them talking to friends and family and thinking about making lifestyle changes such as losing weight, drinking less alcohol, giving up smoking and doing exercise (Table 2). Eliminating double counting (Table 2) this group accounted for 50.8%. These intensions to change lifestyles and talk with friends and family indicate a rise in their awareness around OG cancer. However, 26% of respondents took no action after receiving the mail-out.

Would further information about cancer be welcomed in the future?

Most respondents (71.6%) stated they would like to receive further information on cancer in the future. However this desire reduced with age with only 34% of those over 85 years wishing to receive such information. The preferred method of receiving information was by post.

Discussion

This study gives a unique insight into how a direct mail-out of cancer awareness information made people feel, with more respondents feeling comfortable with the information than having negative feelings. It has also shown that awareness of oesophago-gastric cancer can be raised with most respondents not only recalling the key messages relating to these cancers, but also either discussing the issue or intending to make lifestyle changes. This is the first study of its kind to use a direct mail out to a target population with information and advice about symptoms and lifestyle for oesophago-gastric cancer.

Confirming previous research in this area almost 40% of respondents reported knowing nothing about oesophago-gastric cancer prior to receiving the leaflet. Although, symptom recall and knowledge was not objectively assessed this is likely to reflect the fact that the public have poor awareness of symptoms related to oesophageal cancer. Individuals are less likely to recall difficulty swallowing as a cancer warning sign in comparison to other signs in the cancer awareness measure [9]. Reducing cancer risk through health promotion was a key message in this campaign; however this was only recognised by half of the respondents. Although this message was highlighted in both the "Be Clear on Cancer" leaflet and the separate leaflet on lifestyle and cancer, it was not mentioned in the covering letter. Interestingly there was high recall of the messages in the covering letter; however we were not able to ascertain whether this related to the nature or presentation of the information.

The majority of respondents were interested in the leaflet and the majority felt comfortable rather than uncomfortable or worried by the information presented. This positive response was also reflected in the desire to receive further cancer awareness material in the future. Acceptability of this type of material has also been shown by Forster et al, who found that written material promoting breast cancer awareness provided at breast screening did not make women anxious or feel offended [10].Ethnicity and gender may play a role in how such leaflets are perceived. This sample was predominantly made up of white males due to the study design, thus limiting applicability to other populations.

Table 2 Reported actions taken following mail out.

Response	n (%)
I made an appointment to see my GP	47 (8.9%)
I spoke to my local pharmacist	16 (3.0%)
I'm thinking about giving up smoking	25 (4.7%)
I'm thinking about losing weight	90 (17.1%)
I'm thinking about drinking less alcohol	82 (15.5%)
I'm thinking about doing exercise	107 (20.3%)
I talked to my friends or family about the letter and leaflet	132 (25.0%)
I passed the letter or leaflet onto someone else	25 (4.7%)
I threw the letter and leaflet away	51 (9.7%)
Nothing	139 (26.3%)
Other	36 (6.8%)

Half of respondents in our study indicated their awareness of OG cancer had been raised and they intended to take positive action following receiving the information on oesophago-gastric cancer. Many of these were the intention of making lifestyle changes which considering that large numbers of respondents would not have had symptoms at the time of the campaign shows potentially a more general public health benefits. Only 26.3% of respondents said they would do nothing in comparison to 78-80% in the South West and East of England Bowel Cancer Awareness project in 2011 [11]. A quarter of respondents stated that they talked to friends or family which is also more than for the bowel cancer awareness project in which 7-8% followed this course of action. Although a small proportion of respondents stated that they visited their general practitioner from our data is not possible to correlate this with the proportion of patients with symptoms.

Despite the response rate was above the typical rate from general direct mail-out campaigns [12], a third of those returning the survey did not recall receiving the information. Although tailored individual information delivered by post has been shown to improve knowledge of cancer and improve attitudes towards seeking help for them in the short term [13], it may be that additional means of communication are needed to reinforce the information. This could be in the form of a text message or email.

The main limitation of this study was the lack of clinical outcomes of those who sought medical attention and details on the sustained implementation of lifestyle modification. Responses to the survey were anonymised and this was not the purpose of the original study. These details would be needed in larger studies to establish if the implementation of awareness campaigns lead to earlier diagnosis of upper gastrointestinal cancers and long-term changes to lifestyle.

As with all survey studies, responses may have been subject to social desirability bias, with respondents perhaps providing the answers they felt should be given rather than their true thoughts. The influence of this should have been reduced with the surveys remaining anonymous.

Further detailed qualitative research would enable exploration of the emotional responses felt by recipients of direct cancer awareness mail-outs. This could evaluate reactions to each aspect of the material and allow future leaflets about oesophago-gastric cancers to be improved.

In conclusion this is the first study of its kind to investigate the reaction and emotional impact of a direct mail-out campaign on the signs and symptoms of oesophago-gastric cancer. The project has shown acceptability with the target recipients with minimal negative impact and a positive impact in seeking out a health professional as well as indicating a rise in awareness in half of the subjects.

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