

Socioeconomic inequalities in cancer attribution for 'alarm' symptoms

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KEY MESSAGES

- People from lower socioeconomic backgrounds are more likely to be diagnosed at a later stage disease across several common cancers.
- Although it is well established that there are socioeconomic differences in cancer symptom knowledge, we do not know if there are differences in whether people recognise their own 'alarm' symptoms as possibly indicative of cancer.
- This study showed that in a community-sample of people experiencing cancer 'alarm' symptoms, the likelihood of suspecting cancer was low, and even lower in those with less education.

INTRODUCTION

Socioeconomic inequalities in stage at diagnosis of cancer are contributing to poor cancer outcomes.

This may be due partly to socioeconomic differences in cancer symptom knowledge.

However, no studies have examined whether there are socioeconomic (SES) differences in the likelihood of making a cancer attribution when potential cancer symptoms are actually experienced.

We explored how often people considered cancer as a possible cause for 10 classic 'alarm' symptoms, and whether there were any SES differences.

METHODS

A 'general health' questionnaire was mailed to adults (n=9771, ≥50 years, no cancer diagnosis) through primary care in London, South East and the North East of England.

Respondents were asked, within a longer symptom list, whether they had experienced any of 10 cancer 'alarm' symptoms in the past 3 months (see Table 1).

For each of 10 recently experienced 'alarm' symptoms, respondents were asked 'what do you think caused it.'

Associations between demographic characteristics and likelihood of making a cancer attribution were examined for each symptom using complex samples logistic regression analysis.

RESULTS

Sample:
Response rate was 39% (3766/9771), (age ≥ 50 years), 54% women, 12% ethnic minority, 39% university educated.

Symptom prevalence and cancer attributions:
1790/3766 (48%) reported at least one cancer 'alarm' symptom.

A very small proportion (4%; 63/1790) of those who had experienced 'alarm' symptoms mentioned cancer as a possible cause.

RESULTS

Table 1 Prevalence of warning signs reported in the past 3 months, and number of cancer attributions

	Respondents reporting symptom N (%)	Mentioned cancer as a possible cause N (%)
Symptom type		
Persistent cough	629 (16.9)	8 (1.5)
Change in bowel habits	483 (12.9)	11 (3.0)
Persistent unexplained pain	476 (12.8)	5 (1.4)
Change in bladder habits	413 (11.1)	2 (0.2)
Change in a mole	273 (7.3)	19 (10.7)
Unexplained lump	205 (5.5)	13 (8.8)
A sore that does not heal	148 (4.0)	4 (3.5)
Unexplained weight loss	143 (3.8)	1 (0.9)
Difficulty swallowing	120 (3.2)	4 (4.6)
Unexplained bleeding	108 (2.9)	4 (4.7)

In total 71 cancer attributions were made across all symptoms.

The highest number of cancer attributions was for change in the appearance of a mole (n=19).

Higher education was the only demographic variable independently associated with greater likelihood of making a cancer attribution (OR 2.92, 1.70-5.01), controlling for sex, age, employment, ethnicity and marital status.

CONCLUSION

Levels of 'cancer suspicion' were low in this community sample, but even lower in people from less educated backgrounds.

This may contribute to inequalities in stage at diagnosis.

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