Investigating the Actual and Potential Role of the General Practitioner, Practice Nurse and Nurse Practitioner in the Prevention of Cancer

Executive Summary

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Executive Summary

BACKGROUND

Cancer-incidence and trends
Cancer is the cause of around 7.6 million deaths (13% of all deaths) worldwide and, it is estimated, that this will rise to some 12 million deaths by 2030 (WHO, 2011). Each year, more than 309,000 people are diagnosed with cancer in the UK (Cancer Research UK, 2011). A total of 23,992 persons are listed on the Cancer Register in Northern Ireland (NISRA, 2010).

Cancer occurs predominantly in older people, with almost three out of four cases (74%) diagnosed in people aged 60 and over, and more than a third (36%) in people aged over 75. In the United Kingdom, prostate cancer is the most commonly diagnosed cancer in males, with lung cancer the second most common cancer followed by bowel cancer - these three cancers account for over half of all male cases. Breast cancer is by far the most common cancer in females (accounting for circa one third of all female cancers), followed by colorectal and lung cancer. These cancers account for over half of all female cases.

Cancer prevention activities invariably take on a risk factor-orientated approach. These are aimed at the avoidance and reduction of risk factors associated with the disease, coupled with the employment of early detection practices (WHO 1998). The European Code against Cancer (2003) acknowledged that many aspects of general health can be improved by adopting a healthier lifestyle, but indicated that changes in lifestyle can also prevent certain cancers. Stopping smoking, avoiding obesity; undertaking some daily physical activity; increasing the daily intake and variety of vegetables and fruits; moderating consumption of alcohol; avoiding excessive sun exposure and preventing any exposure to known cancer causing substances are cited as key cancer avoidance strategies. In addition, The European Code against Cancer also indicated that public health programmes can prevent cancers developing (or increase the probability that a cancer may be cured).
The Quality and Outcomes Framework (QOF) for GPs in the UK directly influences the prevention activities undertaken by GPs and Primary Care Nurses. The QOF provides a mechanism for improving the quality of services and for rewarding GPs financially for the achievement of quality standards. The QOF contains groups of indicators, against which practices score points according to their level of achievement.

Rationale
In the context of the global initiative to establish cancer prevention and control frameworks (WHO, 2005), this study focused on how primary care professionals see their cancer prevention role within this agenda. The recent cancer control programme drafted for Northern Ireland recommended that ‘the clinical role of all community and primary care professionals should be developed, particularly in relation to health promotion, screening and symptom recognition’ (DHSSPS, 2006). The study reported here sought to establish how GPs and primary care nurses perceived further developing their cancer prevention role.

STUDY AIM AND OBJECTIVES

Aim
The aim of this study was to investigate the current and the potential role of the GP and the Primary Care Nurse (PCN) in the prevention of cancer through health promotion strategies. (For the purpose of this study, ‘Primary Care Nurse’ includes Nurse Practitioners; Practice Nurses and Treatment Room Nurses (where they have a combined role as Practice Nurses)).

Objectives
The objectives of the study were:

- To examine the current role of the GP and Primary Care Nurse in the prevention of cancer;
- To identify their perception of the potential role of the GP and Primary Care Nurse in cancer prevention;
- To explore inhibiting and facilitating factors to achieve and develop these roles;
To **identify strategies** to overcome difficulties associated with cancer prevention in primary care

**METHODOLOGY**

The study used a sequential exploratory mixed methods approach. It was comprised of two stages. The first stage was a quantitative stage and used a questionnaire approach. The results from the questionnaire survey informed the development of the interview schedule for Stage 2. Stage 2 was a qualitative stage and used semi-structured interviews as the data collection method.

**Stage 1: Postal Survey**

Two postal surveys encompassing 345 General Practices within Northern Ireland were undertaken – one with GPs and one with Primary Care Nurses.

A total of 1249 Questionnaires were issued to GPs. Twenty-three percent (n=290) were returned; of these 8 were unusable as the majority of questions were not addressed and, in one questionnaire, notations had been made on the document but no boxes completed.

A total of 500 questionnaires were sent to Primary Care Nurses. Forty five percent (n=225) were returned, of which 5 were unusable since the majority of questions were not addressed. (Most nurses (84.7%) identified themselves as Practice Nurses).

**Stage 2: One-to-one interviews**

Twenty eight one-to-one interviews were conducted with fourteen GPs and fourteen Primary Care Nurses. Each interview was recorded with consent and subsequently transcribed for content analysis.

**Ethical approval**

Ethical approval was granted by the School of Nursing Ethics Filter Committee and the Office for Research Ethics for Northern Ireland (ORECNI) prior to the study commencing.
KEY FINDINGS
This study investigated the role of General Practitioners and Primary Care Nurses in the prevention of cancer. It identified the activities routinely performed by these clinicians and ways to enhance service provision relating to cancer prevention in primary care. Based on the findings, the conclusions are summarised under the following three headings:

The current role of GPs and Primary Care Nurses in the prevention of cancer

- Most cancer prevention activities that take place in primary care are delivered by Primary Care Nurses;

- Primary Care Nurses address many of the risk factors for cancer incorporated as discreet elements within the QOF, albeit subsumed within the provision of healthy lifestyle advice;

- Smoking cessation and cervical screening are the primary cancer prevention activities carried out in primary care;

- While GPs in this study unanimously acknowledge their important role in cancer prevention, they do so in the context of a wider health promotion agenda as cancer prevention is not a discreet element within QOF;

- The link between cancer and the key risk factors of alcohol consumption, obesity, diet and physical exercise is generally only discussed with patients at GP consultations in the context of the patients’ presenting problems and in relation to clinical complications that may arise in the short to medium term. (The potential to develop cancer in the longer term is invariably outside the remit of the consultation);

- Primary Care Nurses only perform activities approved by the GPs (typically directly associated to the requirements of QOF); this limits their capacity in relation to cancer prevention activities outside of the parameters established by the GPs;
• GPs are primarily interventionist in their clinical practice and any cancer prevention activities performed by them are generally opportunistic, such as when clinical symptoms indicate a potential diagnosis of cancer;

• GPs perceive nurses to be better placed to provide cancer prevention activities and the findings indicate that nurses concur with this view;

• Primary Care Nurses have a relationship with patients that is different to the GP:patient relationship, with patients perceived to be more comfortable in conversation with nurses rather than GPs;

• The relationship developed between the Primary Care Nurse and the patient provides opportunities for open discussion. It has the potential to address issues broader than the particular presenting conditions, including behaviour/lifestyle changes in relation to cancer prevention;

The potential role of GPs and Primary Care Nurses in the prevention of cancer

• Primary Care Nurses are best placed to further develop the cancer prevention role in primary care (subject to the necessary resources);

• The requirement to ensure equitable access to cancer prevention services was widely acknowledged by participants in this study; nonetheless, there was no evidence of meeting the requirements of persons with ‘special needs’ (e.g. mental health or learning disability);

• Participants reported that, as an element within the QOF, persons with mental health problems or learning disabilities receive an annual consultation. However, the consultation is described as general in nature, not focussing on cancer prevention or, indeed, cancer per se;

• There is a dearth of information leaflets produced in languages other than English. However, it would appear that this does not compromise clinical interventions as each clinician has access to an interpreter and English-speaking relatives typically accompany patients who are unable to speak English.
Inhibiting and facilitating factors in the current and potential role of GPs and Primary Care Nurses in the prevention of cancer

- The QOF determines much of the activities undertaken by both GPs and Primary Care Nurses and reduces the time available during consultations to address anything other than the patient’s presenting problem;

- The absence of a ‘cancer prevention’ element within QOF dictates that it is not an area of particular focus for GPs;

- While acknowledging that cancer prevention is an integral part of the role of both GPs and Primary Care Nurses (and that the potential to develop further the cancer prevention role existed), time is consistently identified as a critical limiting factor;

- The clinician:patient relationship is critical to securing behaviour change in patients;

- Almost all GP and Primary Care Nurses in this study agreed with empowering individuals to take responsibility for making decisions regarding health issues and providing patients with information about better lifestyle choices;

- Both GPs and Primary Care Nurses believed that they can influence patients to change their lifestyle (where patients were motivated to do so). However, a requirement for clinician training in behavioural change was identified;

- A personal experience of cancer directly influenced both cancer prevention activities undertaken by clinicians and the public seeking access to cancer prevention interventions;

- There is a marked difference in confidence levels in delivering cancer prevention activities between GPs and Primary Care Nurses, with GPs perceiving themselves as being more confident;

- While GPs and Primary Care Nurses believed that they were reasonably well informed about cancers and cancer prevention, they acknowledged that their current level of knowledge could be improved upon;
- GPs generally have a preference for routine updates, distributed electronically. However, Primary Care Nurses indicated a preference for more formal presentations, suggesting that study days would be preferable;

- Both GPs and Primary Care Nurses made reference to the potentially significant and positive contribution to cancer prevention made by the media, particularly when this is linked to known personalities;

- Social media (and social network sites in particular) offer significant potential to inform and influence health behaviours in cancer prevention but this remains an area that is underexploited.
LIMITATIONS OF THE STUDY

The use of surveys is reliant on people completing and returning questionnaires and a number of strategies were employed to maximise the return of questionnaires by GPs and Primary Care Nurses. However, a response rate of 23% (GPs) and 45% (Primary Care Nurses) may be viewed as low. This reflects the experience of other primary care researchers.

As with all self report surveys, it is possible that GPs and PCNs responded in ways that reflected best practice rather than what they actually do. Response rates from both cohorts were slightly lower than the anticipated response rate of circa 30% (GPs) and in excess of 50% (Primary Care Nurses).

The questionnaires returned by each cohort were subjected to power analysis in order to confirm that the level of returns would reasonably reflect the population under study. Calculation of the statistical power of the findings was based on both the GP and the Primary Care Nursing sample. It indicates that, at a 95% confidence level and a percentage level of 50%, the confidence interval for the GP sample is 5.06 and the confidence interval for the Primary Care Nurse sample is 4.85. This indicates that, even if a greater number of returns had been received, one could be 95% confident that the analysis of the data would produce similar results.

Following the stakeholder interviews, it was decided to issue all questionnaires through the Practice Manager in each general practice. Despite significant follow-up telephone calls, it is possible that the Practice Manager delayed the distribution of the questionnaires to both GPs and Primary Care Nurses or, in some cases, failed to do so. This may have further reduced the response rate from both cohorts.
RECOMMENDATIONS
Recommendations are presented in two sections: recommendations for general application and recommendations that may be taken forward by Cancer Focus Northern Ireland.

Recommendations for General Application
It is recommended that:

Role Development
- Consideration should be given to the incorporation of cancer prevention as a discreet element within the QOF framework. This would further encourage GPs to incorporate cancer prevention into their patient consultation:

- Consideration be given to the development of a more formal cancer prevention role for Primary Care Nurses;

- As the majority of respondents (87%) were identified as Practice Nurses, consideration should be given to the role of the Nurse Practitioner in cancer prevention activities in primary care. These specialists have greater freedom in their role and may offer better potential for developing the nurses’ role in cancer prevention in primary care;

- Further consideration needs to be given to the nurse:patient interaction/relationship as both GPs and Primary Care Nurses believe that the Primary Care Nurse is best placed to deliver cancer prevention activities in primary care;

Persons with ‘Special Needs’
- Cancer prevention activities need to be formally incorporated into the annual clinical GP consultation for persons with mental illness and learning disabilities.
Recommendations to be taken forward by the Cancer Focus Northern Ireland

It is recommended that:

Persons with ‘Special Needs’

- A strategy to address the deficits in cancer prevention activities for persons with ‘special needs’ be developed. The strategy should seek to change the contemporary, limited perception of ‘special needs’ as held by primary care clinicians in this study and should have a particular focus on elderly persons where the incidence of cancer rises dramatically (WHO, 2011) and cognitive impairment is most common;

Training and Education

- As Primary Care Nurses perform the lead role in cancer prevention activities in primary care, appropriate training programmes should be developed for this staff cohort so as to optimise their performance. Training should include theories of behaviour change;

- Further inter-professional training in cancer and cancer prevention should be developed to increase awareness of risk factors in cancer associated with elements of the European Code against Cancer (2003). Further training should take cognisance of the requirement for routine information on developments in cancer prevention, diagnosis and treatment and to extend cancer prevention activities beyond the current focus on smoking cessation and cervical screening;

Provision of Information

- GPs and Primary Care Nurses should receive regular updates, possibly via email, social networking, or leaflets, providing information on cancer prevention developments and events. Presentations and study days for Practice Nurses should also be supported;

- A strategy to maximise the impact of public notices and leaflets should be developed as the study has demonstrated a wide variation in the use of such media in general practice;
• A strategy to optimise the potential for the use of social media in cancer prevention, particularly with children/adolescents when there is an opportunity to influence their behaviour/lifestyle choices at their stage of life.

Recommendations for Further Research

• A detailed study of how older persons receive and process cancer prevention information should be undertaken to investigate how to improve awareness of the risk factors for cancer in older persons;

• A survey should be undertaken into Trust-employed community nurses’ actual and potential role in cancer prevention and how this differs from that of the GP-employed PCN;

• An action research study should be undertaken to test the effectiveness of cancer prevention interventions among PCNs;

• A clinical trial should be undertaken where the knowledge, behaviour and attitudes of PCNs who receive an educational package on cancer prevention and behavioural change are compared with PCNs who receive no such training;

• An observational study should be undertaken to investigate whether the actual cancer prevention activities of PCNs reflects what they say they do in this regard.

• A survey of general practitioners should be undertaken to investigate how GPs can maximise the engagement of patients with public displays of cancer prevention material in general practices;

• A survey of patients’ perception of public notices and leaflets should be carried out to better understand how patients perceive and respond to the display of cancer prevention material in general practices;

• A survey of general practitioners should be undertaken to investigate how cancer prevention activities can be incorporated into ‘walk in’ services where consultation time is further restricted;
• There is a need to identify how best to promote cancer prevention within the parameters of the annual consultation (required by QOF) that GPs have with persons with mental illnesses and learning disabilities.

• As the clinician:patient relationship was identified as critical to securing behaviour change in patients, a study should be undertaken to investigate the most effective theory of change to apply in general practice;

• A survey should be conducted to better understand how younger persons use social media in order to identify the most effective strategy for engaging this cohort in cancer prevention activities using such media.
REFERENCES

http://info.cancerresearchuk.org/prod_consump/groups/cr_common/@nre/@sta/docu-
nents/generalcontent/018070.pdf

European Code against Cancer (2003) European Institute of Oncology, Milan, Italy

Quality Outcomes Framework Cancer Register (Northern Ireland)

Department of Health, Services and Public Safety (2006) Regional Cancer Framework: 
A Cancer Control Programme for Northern Ireland. DHSSPS, Northern Ireland

Organisation, Geneva, Switzerland

World Health Organisation’s Report of 58th World health Assembly, (2005), World Health 
Organisation, Geneva, Switzerland

Switzerland