



## **Cancer Prevention: knowledge, attitude and behaviours of people in mid-life - Executive Summary**

Keeney, S., McKenna, H., Fleming, P., & McIlpatrick, S. (2006). *Cancer Prevention: knowledge, attitude and behaviours of people in mid-life - Executive Summary*. Ulster University.

[Link to publication record in Ulster University Research Portal](#)

### **Publication Status:**

Published (in print/issue): 01/10/2006

### **Document Version**

Publisher's PDF, also known as Version of record

### **General rights**

Copyright for the publications made accessible via Ulster University's Research Portal is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

### **Take down policy**

The Research Portal is Ulster University's institutional repository that provides access to Ulster's research outputs. Every effort has been made to ensure that content in the Research Portal does not infringe any person's rights, or applicable UK laws. If you discover content in the Research Portal that you believe breaches copyright or violates any law, please contact [pure-support@ulster.ac.uk](mailto:pure-support@ulster.ac.uk).



UNIVERSITY of  
**ULSTER**



# Cancer Prevention: knowledge, attitude and behaviours of people in mid-life

## EXECUTIVE SUMMARY

October 2006



# cancer



# PREVENTION



## **ACKNOWLEDGEMENTS**

This study was funded by the Ulster Cancer Foundation.

Special thanks are extended to those who participated in focus groups and to those who responded to the survey for their time and willingness to share their views without which this study would not have been possible.

*Published by: University of Ulster, Northern Ireland*

*All rights reserved. No part of this publication may be reproduced, stored in any retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, with the prior permission of the publisher.*

**© Keeney, S. McKenna, H.P., Fleming, P. & McIlfatrick, S.J.**

***University of Ulster, Northern Ireland (2006)***

## **RESEARCH TEAM**

**Professor Hugh McKenna**, Principal Investigator, Dean, Faculty of Life and Health Sciences

**Sinead Keeney**, Senior Research Fellow, Institute of Nursing Research

**Paul Fleming**, Associate Dean, Faculty of Life and Health Sciences

**Dr. Sonja McIlpatrick**, Lecturer in Nursing, Institute of Nursing Research

## TABLE OF CONTENTS

Introduction	5
Aims and objectives	5
Rationale for the study	5
Research design	6
Methodology	6
Ethics	7
Focus group findings	7
Survey findings	8
Knowledge of cancer	8
Provision of cancer prevention information	8
Help and support	8
Acquisition of cancer prevention information	9
Dealing with cancer prevention information	9
Attitudes and beliefs about cancer	9
Skin cancer behaviours	10
Colorectal cancer behaviours	10
Lung cancer behaviours	10
Conclusion	10
Recommendations	11
Priority groups	11
Provision of information	11
Targeting of information	12
Positive action	12
Further research	13
References	14

## **Introduction**

Cancer is used as a generic term to describe over 100 diseases that can affect any part of the body. In 2003, cancer was the cause of 26% of all deaths in the United Kingdom (UK). In Northern Ireland, cancer was responsible for 3,757 deaths in that year, 25% of all deaths. These statistics are part of an ongoing trend showing slight increases in cancer deaths overall with approximately 9,000 people diagnosed with cancer in Northern Ireland each year (Cancer Research UK, 2006). Cancer prevention is understood to describe educational, policy and infrastructural initiatives and interventions. There is little doubt that prevention is the most important and reliable cancer fighting strategy that exists today (National Cancer Institute, 2006).

## **Aims and Objectives**

The aim of this study was to explore the stated knowledge, attitudes and behaviours of people in mid-life (between 35 and 54 years of age) in Northern Ireland with regard to cancer prevention measures.

The objectives of the study were:

- To explore the knowledge of people in the mid-life stage to cancer and its prevention;
- To explore the provision and acquisition of cancer prevention information within this age group;
- To explore generic attitudes of people in this age group to cancer and its prevention;
- To explore the behavioural intentions of people in the mid life stage to prevent cancer in relation to attitude, subjective norms and behavioural control;
- To identify actions that will enhance cancer prevention measures with this population.

## **Rationale for the Study**

It is clear from previous research that the knowledge, attitudes, and behaviour of the general public with regard to cancer prevention need to be addressed through education and intervention. No study to date has assessed these parameters for people aged 35 to 54 in Northern Ireland. The absence of this evidence means that it is difficult to target cancer prevention messages with any identifiable effect. This is important due to the fact that as much as 80% of all cancers are potentially preventable (National Cancer Institute, 2006). Lung and bowel cancer have been chosen for exploration as they are among the top three most common cancers for both men and

women in Northern Ireland. Skin cancer has also been chosen because of the rapid increases in non-melanoma skin cancer diagnoses.

## **Research Design**

The study used a mixed methods research design incorporating the following stages:

1. Exploratory focus groups
2. Representative survey
3. Volunteer sample survey

## **Methodology**

Six focus groups were undertaken in total with between 6 and 10 participants in each group. With regard to the constitution of the groups, four mixed gender groups, one male only and one female only were undertaken to gather exploratory data on the differences in knowledge, attitudes and beliefs of men and women. Data was analysed using Miles and Huberman's (1994) structured approach. The findings of the focus groups were used to inform the next stage of the study in designing the survey.

The second stage of the study was a postal survey to members of the public to explore their attitudes, knowledge and behaviours towards cancer prevention. The sample was drawn from the Northern Ireland Edited Electoral Register and stratified by gender and geographical location. The target sample size was set at 1,065 for a representative sample using a confidence level of 95% and a confidence interval of 3. Five thousand questionnaires were distributed across Northern Ireland. Data from returned questionnaires was analysed using a range of parametric and non-parametric tests. Analysis included descriptive statistics as well as regression procedures.

The third stage of the study was a volunteer sample survey. People were asked in stage two to return their contact details independently of the stage two questionnaires if they were willing to be involved in a follow up stage within the study. In total, 267 respondents volunteered to take part in the final stage. All volunteers were sent a short questionnaire which explored perceptions of help and support in further depth and views on provision of help and support from key informational sources. A leaflet on either skin or colorectal cancer or on stopping smoking was included with the questionnaire and respondents were asked a series of evaluative questions about the leaflet. Quantitative data from the survey were analysed using descriptive and non-parametric

statistics in SPSS and the qualitative data was analysed using Burnard's (1996) method of content analysis.

## **Ethics**

Ethical approval was granted by the University of Ulster Research Ethics Committee.

## **Focus Group Findings**

Focus group findings uncovered the following:

- There was a low level of knowledge of cancer prevention among the participants;
- Most participants were able to identify at least one cancer prevention behaviour such as not smoking or eating five portions of fruit and vegetables a day;
- Some cancer prevention behaviours identified were questionable such as eating bioactive yogurt regularly;
- There were differences in levels of awareness between male and female participants in the groups;
- Participants were unsure of health promotion initiatives on how to prevent cancer;
- There were varied attitudes towards the effectiveness of health promotion initiatives on cancer prevention;
- Sources of cancer prevention information were identified including television advertisements and programmes, radio, newspapers, magazines and word of mouth;
- There was a strong perceptions, especially among the male participants, that sometimes the amount of information provided was overwhelming and that this led to people ignoring it;
- Male participants felt that information should be clear and concise and that the warning signs of cancer should be communicated widely;
- Participants felt a lack of trust and confidence in some of the information being provided;
- There was an emerging attitude from some participants of "*it won't happen to me... I don't want to know*";
- Many participants felt that changing their behaviour with regard to cancer (i.e. stopping smoking or using sunscreen) was a question of individual choice and did not want to be told what to do;
- There was some fear and fatalism expressed regarding cancer within the groups.



## **Survey Findings**

Stage 2 and stage 3 survey findings are presented together within this report. The response rate for stage 2 was 47% and for stage 3 was 61%. Main findings showed the following:

### ***Knowledge of Cancer***

- The average number of warning signs identified within this sample was 4.8 out of 7;
- On average, female respondents had a higher level of knowledge than male;
- Number of warning signs identified correctly varied according to age, gender, level of educational attainment, income, socio-economic status (SES) and housing tenure;
- On a sign by sign basis, there was variation in correct identification of warning signs or distracter signs in relation to gender, age and level of education.

### ***Provision of Cancer Prevention Information***

- Television advertising was considered by the sample to be the most effective method of providing cancer prevention information. This was advocated more strongly by those respondents with a high level of knowledge of cancer warning signs;
- There is variation in preferences for the provision of cancer prevention information in relation to a range of demographics including gender, level of education and SES;
- A large percentage of the sample stated that they had no opinion on the most effective method of providing cancer prevention information.

### ***Help and Support***

- Help and support to prevent cancer was considered by respondents to be primarily through information such as leaflets and television advertisements. Secondary sources of support were considered to be the General Practitioner (GP) or the nurse at the health centre (practice nurse);
- 25% of respondents felt that there was no support available to help them prevent cancer;
- Women are significantly more likely than men to perceive the practice nurse as a source of help/support to prevent cancer;
- Women are also significantly more likely than men to view soap operas as a source of help/support to prevent cancer;

- Types of help/support required to help prevent cancer as identified by the sample included accurate and understandable information, an annual check up and practical help with diet and genetic testing.

### ***Acquisition of Cancer Prevention Information***

- In relation to the sources that people acquired cancer prevention information from, there were differences noted between those with a high level of knowledge and those with a low level of knowledge of cancer prevention;
- Respondents with a lower level of knowledge are more likely to acquire information about cancer prevention from people who have cancer or by word of mouth;
- There was demographic variation in the sources used to acquire cancer prevention information with regard to age, gender, SES, level of education, marital status, housing tenure and rural/urban location.

### ***Dealing with Cancer Prevention Information***

- The majority of respondents stated that they would agree with cancer prevention information and think about making some lifestyle changes;
- 18% of respondents with low knowledge of cancer prevention and 11% with high knowledge of cancer prevention stated that they would agree with the information but do nothing about it;
- 1% of respondents with low knowledge of cancer prevention stated that they would disagree with the information;
- Predictors of dealing with cancer prevention information in a positive manner include gender and SES. Women and people in a higher socio-economic group are more likely to deal with cancer prevention information positively.

### ***Attitudes and Beliefs about Cancer Prevention***

- There is variation across all demographics with regard to attitudes and beliefs held about cancer prevention.

### ***Skin Cancer Behaviours***

- Subjective norm (an individual's beliefs about what significant others think of/about them with regard to behaviour) and perceived behavioural control (an individual's perception of their ability to carry out a behaviour) are predictors of a person's intention to use sunscreen;
- A favourable or unfavourable attitude to the sun does not predict sunscreen use within this sample;
- People with low intention to use sunscreen and those with high intention display different beliefs about the sun, sunbathing and its dangers.

### ***Colorectal Cancer Behaviours***

- Attitude, subjective norm and perceived behavioural control are predictors of intention to eat five portions of fruit and vegetables a day;
- People who display low intention to eat five portions of fruit and vegetables a day and those with high intention hold different beliefs about the cancer prevention properties and usefulness of eating five portions of fruit and vegetables every day.

### ***Lung Cancer Behaviours***

- Attitude, subjective norm and perceived behavioural control (self-efficacy) are predictors of intention stopping smoking;
- The measure of perceived behavioural control (controllability) is not a predictor of intention to stop smoking within this age group;
- An unfavourable attitude to smoking and its effects is a predictor of intention to stop.

### **Conclusion**

This study has explored the knowledge, attitudes and behaviours of people in mid-life towards cancer prevention. It has uncovered a range of findings in relation to the provision and acquisition of cancer prevention information in this age range that will assist in the effective targeting of such information to members of the public in this age range. Furthermore, the study has provided insight into the salient attitudes and beliefs that need to be targeted within this age group to endeavour to effect behaviour change.

Priority groups have been identified as single men and those people in a low socio-economic group. Findings from this study can be used to effectively target these groups within the necessary information in a method advocated by these groups. Evaluation of these methods in effecting an increase in knowledge or behaviour change will be necessary. This targeting of sub-groups within the population should be mirrored in all other groups. This study has also pointed to further necessary research to provide specific insight into issues arising from this study. This further research is outlined in detail in the recommendations section of the report.

The outcomes from this study should be used to inform policy and identify strategies to enhance the cancer prevention knowledge and actions in this population. In turn, it is anticipated that this will have an impact on cancer deaths and diagnoses in the future.

## **Recommendations**

A series of recommendations have arisen from the findings of this study as follows:

### **Priority Groups**

1. Priorities for the targeting of information and education on the warning signs of cancer should be:
  - Single men;
  - People in lower SES groups.

### **Provision of Information**

2. A strategy should be developed to raise this population's knowledge of cancer warning signs so as to promote recognition of early signs of cancer.
3. A clear, concise message of the warning signs of cancer should be communicated to all men in this age group with the immediate priority being single men
4. The risks posed by cancer to this age group should be communicated clearly and concisely and risk factors, including age, should be widely publicised.

5. Cancer prevention information should continue emphasising the progress made in the successful treatment of cancer. Statistics about risk and survival should be communicated accurately.

6. Cancer prevention leaflets should be distributed and made available in a wider range of public places such as supermarkets, churches or community centres.

7. Sources of support to prevent cancer should be communicated to people within this age band with particular attention placed on women in the age band 35 to 44 years.

### **Targeting of Information**

8. Attitudinal profiles of sub-groups within this population should be used to inform the targeting of cancer prevention information with the aim of changing behaviour.

9. Cancer prevention information should be tailored for sub-groups within this population. It should be communicated in a meaningful manner as suggested by each sub-group. More accurate targeting of lower SES groups needs to be developed based on the premise that media sources are not highly advocated by this group.

10. Profiles of low intenders should be used as a basis for targeting information with the aim of changing their attitudes and behaviours towards cancer.

### **Positive Action**

11. Consideration should be given to developing strategies to help men feel more comfortable with attending health centres for appointments with the GP or nurse.

12. Consideration should be given to strategies to help people in a lower socio-economic group approach their health in a more positive manner and to empower them to take control of their own health.

13. Strategies should be introduced to empower people in mid-life to take control of their health emphasising, where feasible, what they *can do* instead of what they *shouldn't be doing*.

14. Access to gymnasiums and sports facilities should be improved and subsidised as necessary to encourage healthy lifestyles within this age group. Further research should be undertaken to assess if this is effective in levels of fitness, health and reduction of weight.

15. Positive perceptions about eating five portions of fruit and vegetables a day need to be promoted to change the attitudes of low intenders. Strategies should be put in place to dispel myths surrounding fruit and vegetable intake and make portion sizes clear and unambiguous.

### **Further Research**

16. Further exploration should be undertaken into the effect that the cost of sunscreen has on the intention to use it to prevent skin cancer.

17. The complex relationship between women and the sun, sunbathing and using sunscreen needs to be explored. Additionally, reasons why fake tan does not compensate for lying in the sun should be included in this exploration.

18. Reasons need to be explored as to why heavy smokers in all sub-groups within this age group, especially people in lower socio-economic groups continue smoking. Research needs to be undertaken to examine what can be done to help them stop and what tactics will work to help the wider population in each of these sub-groups.

19. Further exploratory work should be undertaken with people who hold the attitude of '*not wanting to know*' to uncover the salient beliefs that need to be changed.

20. The reasons why housewives and househusbands have an elevated level of knowledge of cancer warning signs needs further exploration.

21. Further research should be undertaken to explore the need for a cancer prevention role within primary care.

## References

Burnard, P. (1996) *Nursing Research in Action: developing basic skills* London, Macmillan.

Cancer Research Northern Ireland (2006) Cancer statistics  
<http://www.cancerresearchuk.org/inyourarea/northernregion/> (accessed 05/09/06)

Miles, M.B. & Huberman, A.M. (1994) *Qualitative Data Analysis: An expanded sourcebook*. Sage, USA.

National Cancer Institute (US) (2006) Cancer Prevention Information  
<http://www.nci.nih.gov/cancerinfo/pdq/prevention> (accessed 05/09/06)