

Establishing a cohort of lung cancer patients to investigate recovery following surgery with curative intent – a feasibility study

Claire Foster¹, Lynn Calman¹, Rebecca Foster¹, Alison Richardson^{1,2}, Peter Smith³, Janis Baird⁴, Kinta Beaver⁵, John Edwards⁶ Contact: L.Calman@soton.ac.uk
 1. Faculty of Health Sciences, University of Southampton 2. University Hospital Southampton NHS Foundation Trust 3. S3RI, University of Southampton
 4. MRC Lifecourse Epidemiology Unit, University of Southampton 5. School of Health, University of Central Lancashire 6. Sheffield Teaching Hospitals NHS Foundation Trust

Introduction

Little is known about support needs and patterns of recovery among lung cancer patients following surgical treatment with curative intent. Existing Quality of Life data is limited, contradictory and does not always address issues important to patients, such as the impact of cancer on their everyday lives [1,2]. The collection of Patient Reported Outcome Measures (PROMs) using a holistic model of recovery of health and well-being would allow a greater understanding of the factors that enable people to regain their health, what prevents this from happening and what might be put in place to facilitate recovery. We are conducting an innovative study to test the feasibility of establishing a cohort of patients to collect PROMs and investigate recovery of health and well-being after lung cancer surgery.

Aim

To test whether it is feasible to gather information from a large group of lung cancer patients treated with curative intent through patient completed questionnaires, repeated over time.

Methods

A prospective, longitudinal cohort study design was employed. Eligible lung cancer patients, due to undergo surgery with curative intent, were recruited at nine geographical sites across the UK (see Figure 1). Sites chosen included both large treatment (surgical) centres and small referring centres. The first site opened in August 2013, other sites opened between October and December 2013. Recruitment finished on 31st January 2014. Participants were asked to complete questionnaires before surgery and three months after surgery. Examples of the measures used and data collected during the study are shown in Table 1. A process evaluation of study procedures, using semi-structured interviews with patient participants and local site staff, will be carried out in the next three months.

Table 1: Study Measures

Type of measure	Source	Key examples
Clinical measures	Patient medical records	<ul style="list-style-type: none"> Cancer type TNM stage Comorbidities Performance status Recurrence Other treatments
Patient reported outcome measures (PROMs)	Patient completed questionnaires	<ul style="list-style-type: none"> Health Status ➤ EQ-5D-3L Quality of life ➤ EORTC QLQ-C30, EORTC LC13, QLACS Wellbeing ➤ PWI Coping ➤ Brief COPE Depression ➤ CES-D Confidence to self-manage ➤ Self-efficacy for managing chronic disease
Background measures	Patient completed questionnaires	<ul style="list-style-type: none"> Socio-demographics Lifestyle (including smoking status) Return to work



Figure 1: Study Sites



Findings to date

Patients were recruited in all nine study sites. 247 eligible patients were identified as suitable to take part in the study. As shown in Figure 2, two thirds, 66%, gave their consent to take part: all 162 consented for data from their patient records to be analysed, 146 also consented to complete questionnaires pre-surgery and three months post-surgery. By mid February, 119 pre-surgery questionnaires had been completed and returned. The last three month post-surgery questionnaire is due to be returned in May 2014.

Conclusions

Study findings indicate that it is possible to recruit lung cancer patients in a variety of centres in the UK using our study methods. The majority of patients recruited have completed pre-surgery questionnaires, suggesting acceptability of this form of data collection. This is the first study to test the feasibility of recruiting lung cancer patients to assess wellbeing and to understand patterns of recovery. Informed by the results obtained, we plan to develop a larger scale study, involving a cohort of around 1000 patients followed over a number of years. This novel approach to understanding lung cancer survival will enhance our ability to offer patients appropriate and timely support and identify who is most at risk of protracted recovery.

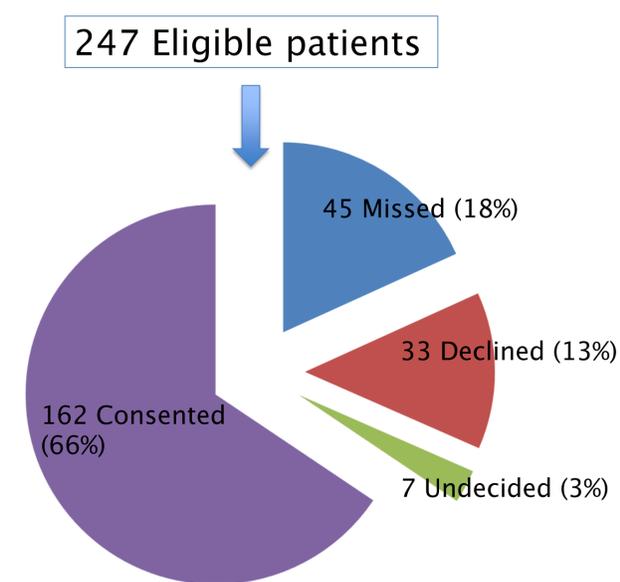


Figure 2: Recruitment Flow

References

- Sarna L, Grannis FW, Coscarelli A. Physical and Psychosocial Issues in Lung Cancer Survivors. In: Chang AE, Hayes DF, Pass HI, Stone RM, Ganz PA, Kinsella TJ et al., editors. *Oncology*. Springer New York; 2006. 1881-1900.
- Corner J, Wright D, Hopkinson J, Gunaratnam Y, McDonald JW, Foster C. The research priorities of patients attending UK cancer treatment centres: Findings from a modified nominal group study. *British Journal of Cancer* 2007; 96(6):875-881.