

# **CANADIAN NURSES FOUNDATION**

## **Scientific Report**

***A description of cardiovascular health, symptom burden, social support and physical and emotional well being in older patients living with cancer***

### **Principal Investigator**

- Joan Tranmer, Assistant Professor, School of Nursing, Faculty of Health Sciences, Queen's University

### **Co Investigators**

- Esther Green, Chief Nursing Officer and Director of Health Human Resources Planning, Cancer Care Ontario
- Linda Robb – Blenderman, Professional Practice Leader, Cancer Centre of Southeastern Ontario and Kingston General Hospital
- Patti Groome, Associate Professor, Community Health and Epidemiology, Faculty of Health Sciences, Queen's University
- Dianne Groll, Assistant Professor, Psychiatry, Faculty of Health Sciences, Queen's University
- Andrew Day, Senior Biostatistician, Clinical Research Centre, Kingston General Hospital
- David Ginsburg, Oncologist, Faculty of Health Science, Queen's University
- John McCans, Cardiologist and Head, Department of Medicine, Faculty of Health Sciences Queen's University

### **Contact Information**

School of Nursing  
Queen's University  
92 Barrie Street  
Kingston, Ontario, K7L 3N6  
Phone: 613-549-6666 Extension 4952  
Fax: 613-548-1381  
Email: [tranmerj@kgh.kari.net](mailto:tranmerj@kgh.kari.net)

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## Background

Recent statistics estimate that more than one third of all Canadians will have some form of cancer and one in four Canadians will have some form of cardiovascular disease. Given that the prevalence and incidence of cancer and cardiovascular diseases increases with age, a growing cohort of patients treated for cancer will have underlying cardiovascular disease, along with other comorbid conditions. Despite this presence of cardiovascular and other underlying illnesses there is a substantial number of elderly persons who sustain relatively good functional health and appear to benefit from, and desire, cancer treatment. Recent evidence, however, suggests that referral to, and treatment for cancer, declines with age. This may be related to a poor understanding of treatment impact and complications in the presence of comorbid conditions, compromised cardiovascular status, and poor social or informal caregiver supports. Therefore, the purpose of this cross-sectional, descriptive study was to comprehensively describe in a cohort of elderly patients who are receiving active cancer treatment, their cardiovascular health status, symptom burden, social supports, and levels of physical and emotional well being.

The specific research objectives were:

1. To systematically measure in older persons newly diagnosed with cancer: indicators of chronic illnesses, specifically cardiovascular health, symptom burden, social support and health related quality of life (HRQL).
2. To describe the relationships between selected personal, health and support characteristics and HRQL.

## Methods

This was a cross - sectional study that recruited patients newly diagnosed with a cancer condition, referred to the Cancer Centre of Southeastern Ontario. Participants were considered for inclusion in the study if they were

- 65 years of age, the age commonly defined as elderly in the research literature
- Diagnosis of cancer as confirmed by the appropriate diagnostic procedures and tests.
- Currently attending the cancer centre for active treatment of their cancer
- Able to complete questionnaires prepared at a Grade 6 level
- Able to communicate via telephone

Patients were excluded if they were:

- Currently on a clinical trial protocol that precluded inclusion in this study
- Currently referred to or receiving palliative care

Between January 2004 to January 2005 we approached all patients who attend the cancer centre within the first 4 weeks following consultation. Upon consent and enrollment participants received a questionnaire package and had the option to complete the package at home or via telephone interview. We collected validated measures of: 1) general and disease specific health related quality of life using the MOS SF12 and the EORTC-QLQ-C30 (2) symptom burden using the Memorial Symptom Assessment Scale (3) social support using the MOS Social Support Survey and (4) functional comorbidity using the Functional Co-morbidity Index. As well, information

regarding cancer diagnosis, classification and treatment was abstracted from the clinical record.

## **Results**

440 participants (44% female), mean age 73 years (Range, 65– 91) years were enrolled at baseline. The majority of cancers were breast (25%), prostate (28%) and gastrointestinal (21%), and categorized as Stage 1-3. Preexisting or past vascular conditions were prevalent: history of angina(14%), heart failure (10%), previous heart attack (10%), diabetes (16%), peripheral vascular disease (7%), stroke (7%), hypertension (49%), high cholesterol (32%) and obesity (21%). Common symptoms, such as lack of energy (69%), pain (53%), feeling worried (54%) and difficulty sleeping (56%) were prevalent. Participants reported high levels of informational, emotional, tangible and social support. Baseline HRQL scores, as measured with the MOS SF12 and the EORTC QLQ – C30, were comparable to the age group norms, and higher in comparison to other chronic disease populations. Lower levels of physical functioning, as measured with the SF12 physical component score (PCS) were significantly associated with female sex, living alone, lower levels of education and income, older age, cardiovascular illness, co-morbid conditions, decreased physical activity, less social support, and symptom burden. Poor emotional functioning, as measured with the SF12 mental component score (MCS) was significantly associated with co-morbid conditions, symptom burden and less social support.

## **Implications**

Findings from this research suggest that older persons with a new cancer diagnosis have physical and emotional functioning levels comparable to persons of similar age, with or without other chronic illnesses. However, there is a cohort of older persons who have a personal and clinical profile indicative of need for increased health care support. Early assessment of these factors should enhance clinical management and care.

## **Publications**

Luctkar-Flude, M.F., Tranmer, J.E., Groll, D.L., & Woodend, K. Fatigue and physical activity in older adults with cancer: A systematic review of the literature. Accepted in *Cancer Nursing* pending revisions.

Groll, D.L., Tranmer, J.E., Luctkar-Flude, M.F., & Wright, J.G. Comparison of chart-abstracted and self-reported co-morbidity with physical function outcomes in older cancer patients. (In progress)

## **Presentations**

Luctkar-Flude, M., Groll, D., Tranmer, J., and Woodend, K. (2006, June). *Fatigue, Physical Activity, Physical Function and Quality of Life in Older*

- Adults with Cancer*. Poster presentation, Nursing Research Day, Nursing Research Council of Southeastern Ontario Health Sciences Centre, Kingston, Ontario.
- Luctkar-Flude, M., and Groll, D. (2006, May). *Fatigue, physical activity, physical function and quality of life in older adults with cancer*. Invited oral presentation at the *Inaugural Regional Oncology Nurses Conference*, Kingston, Ontario.
- Tranmer, J., Green, E., and Robb-Blenderman, L. (2005, October). *Factors associated with functional well being in older persons living with cancer*. Annual National CANO Conference, Montreal.
- Tranmer, J., Green, E., Robb-Blenderman, L., Groll, D., McCans, J., Ginsburg, D. and Day, A. (2004, December). *Health and well being in older persons with cancer*. Poster presentation, Health Services Research Day, Queen's University, Kingston, Ontario
- Tranmer, J., Green, E., Robb-Blenderman, L., Groll, D., McCans, J., Ginsburg, D. and Day, A. (2004, October). *A description of personal, health and social factors that influence quality of life in older persons living with cancer*. Annual National CANO Conference, Calgary, Alberta.
- Tranmer, J., Green, E., Robb-Blenderman, L., Groll, D., McCans, J., Ginsburg, D. and Day, A. (2004, June). *Health and well being in older persons with cancer*. Poster presentation, Nursing Research Day, Nursing Research Council of Southeastern Ontario Health Sciences Centre, Kingston, Ontario.
- Tranmer, J., Robb-Blenderman, L., and Green, E. (2003, October). Optimization of quality of life for elderly persons living with cancer: Providing leadership for problem definition and research direction. Annual National CANO conference, Ottawa, Ontario

### **Related research projects**

We were able to build upon the important support and funding obtained from the Canadian Nurses Foundation to engage in further research. Two projects related to this grant are:

- Health and well being in older persons with cancer: a longitudinal study. Supported by the Oncology Nursing Foundation
- Identifying factors associated with functional decline in older women with breast cancer: development and validation of a self-reported risk profile (SRRP)