

Special Issue on Cancer Cachexia

Susan McClement

College of Nursing, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, Manitoba, Canada

Corresponding author: Susan McClement, PhD, RN
E-mail: susan.mcclement@umanitoba.ca

Received: July 16, 2018; Accepted: July 18, 2018



Susan McClement PhD, RN, is a Canadian nurse researcher and educator in palliative and end-of-life care. She received her interdisciplinary doctoral degree from the University of Manitoba in 2003 and is the current Associate Dean of Research in the College of Nursing at the University of Manitoba. Dr. McClement has a special interest in the patient/family psychosocial dimensions of cancer anorexia-cachexia syndrome in advanced illness and is one of the few nurse researchers in Canada examining this issue. Her research helped to generate a grounded theory to help clinicians understand the patterns of family members' response toward unintentional weight loss in a hospitalized terminally ill relative. Her current research utilizes Kleinman's explanatory model of illness framework to explicate family members' understandings of the etiology of anorexia and cachexia in family members with

advanced cancer and their perspectives regarding its management. Her other research interests include understanding the nature of expert nursing practice in care of the dying; examining ethical issues in providing palliative home care services, and delineating the nature of excellence in providing care to those dying with dementia in long-term care settings.

“Ask a new question, and you will learn new things.”^[1] Cachexia is not a new clinical problem. More than two centuries ago, the Greek physician Hippocrates detailed the relationship between cachexia and chronic heart failure, noting that: “The flesh is consumed and becomes water the abdomen fills with water, the feet and legs swell, the shoulders, clavicles, chest, and thighs melt away this illness is fatal.”^[2] Today, we appreciate that cachexia is also a common clinical feature in people living with renal failure,^[3] infectious^[4] disease, and cancer.^[5]

Important work has been conducted to help us better understand the complicated landscape that is cancer cachexia. Experts have labored to develop a consensus definition to capture its salient features.^[6] Research is being conducted to understand its precise etiology.^[7] Efforts to identify the currently limited pharmacological and nutritional support interventions to help mitigate the

ongoing loss of lean muscle mass in advanced disease continues.^[8] However, there is still more that we need to understand. We need to ask new questions to learn new things about this vexing clinical problem.

This special issue about cancer cachexia helps to advance that imperative. It consists of four papers whose authors have posed salient questions that have enabled us learn new things about a not so new problem. Dr. Jane Hopkinson asks what we know about the experiences and self-management of eating problems in people receiving cancer treatment. Her scoping review about eating problems patients experience during radiotherapy and systemic anticancer treatment is very instructive – both in what it affirms about our knowledge of cancer cachexia syndrome, and the direction, it provides for future research needed to examine eating problems across all cancer sites, patients' perspectives on self-management of their nutritional care,

Access this article online	
Quick Response Code: 	Website: www.apjon.org
	DOI: 10.4103/apjon.apjon_39_18

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Cite this article as: McClement S. Special Issue on Cancer Cachexia. *Asia Pac J Oncol Nurs* 2018;5:355-7.

and ways of empowering and motivating their engagement in it. The dearth of detail identified in her review regarding the practical information on how nutritional interventions are delivered and the lack of rigorous empirical work studying nutritional counseling while troublesome, speaks to the opportunity that exists for those engaged in such counseling to both more fully explicate and evaluate their work, and demonstrate its importance to clinical treatment outcomes. Hopkinson's review underscores the importance of nurses supporting patient self-management of eating problems experienced during cancer treatment by ensuring that nutritional counseling is offered to those cancer patients who are known to benefit from it and that the counseling includes a psychoeducation component that addresses behavior change. Given their knowledge of change theory and frequent contact with patients, and nurses have a key role to play in this regard.

Dr. Granda-Cameron and Mary Pat Lynch ask the question, "How can we guide the care of cancer cachexia patients and identify failures in service hindering the quality of care offered to this patient population?" The genesis for this question was their observation that despite the availability of a one-stop interdisciplinary cancer cachexia clinic model to assess and manage multiple symptoms, some patients did not return for follow-up while others were never referred. Findings from the gap analysis, they conducted about the clinical care being provided speaks to the importance of ensuring a systematic and data-driven approach to identifying needs. The comprehensive interdisciplinary clinical framework the authors advance for quality improvement of the care of patients with cancer cachexia is illuminating. The clinical component of the model shifts our attention from focusing solely on refractory cachexia to include risk assessment and detection of cachexia earlier in the illness trajectory. Health-care organizations are complex entities, and the authors speak to the importance of identifying and mitigating, the myriad of organizational factors that can impede the goal of providing quality care. The Clinical Framework for Quality Care in Cancer Cachexia detailed by the authors may well prove a useful heuristic device for clinicians, educators, researchers, and administrators.

Armed with knowledge about the negative consequences of physical inactivity in the elderly and findings from their previous research documenting muscle depletion in a group of newly-diagnosed advanced non-small cell lung cancer (NSCLC) patients, Dr. Morikawa and his colleagues conducted a longitudinal study to examine the changes in physical activity levels among NSCLC patients hospitalized

to receive systemic chemotherapy. As part of their investigation, they also asked the question, "What is the impact of cancer cachexia on the recovery of physical activity of those patients?" The findings suggest that individuals exhibiting cachexia at baseline may be more sensitive to the deleterious effects of physical inactivity resulting from prolonged hospitalization. The authors also sound a cautionary note regarding iatrogenic causes of reduced patient activity in hospital, many of which are amenable to nursing intervention, and can inform the plan of care of patients with cachexia.

As part of a larger prospective study examining the early introduction of nonpharmacological multimodal interventions for elderly persons with advanced malignancies receiving chemotherapy, Dr. Mouri and his colleagues questioned the feasibility of an 8 weeks' physical activity educational intervention for elderly cancer patients at high risk of cachexia and its associated impacts on exercise behavior on quality of life. While results must be viewed within study limitations, the finding that engagement in a physical activity intervention is safe, feasible, increases activity, and is associated with improved global quality of life is encouraging. Nurses have an important role to play in physical activity promotive counseling and can add it to their toolkit of interventions aimed at optimizing the care of patients with cancer cachexia.

Authors from the United Kingdom, Japan, and the United States contributed to this special thematic issue on cancer cachexia. I am encouraged that clinicians and scholars from a variety of disciplines across the world are devoting time and attention to this important area of study. They are asking important questions and must continue to do so. Given the complexity of cancer cachexia syndrome, I believe that a multidisciplinary lens is the best way to arrive at a fulsome understanding of its impact and management.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Greenstein G. Sidney Dillon Professor of Astronomy Emeritus at Amherst College. Available from: https://www.azquotes.com/author/39115-George_Greenstein. [Last accessed 2018 Jul 03].
2. Katz AM, Katz PB. Diseases of the heart in the works of Hippocrates. *Br Heart J* 1962;24:257-64.
3. Cicoira M, Anker SD, Ronco C. Cardio-renal cachexia syndromes (CRCS): Pathophysiological foundations of a vicious pathological circle. *J Cachexia Sarcopenia Muscle*

- 2011;2:135-42.
4. Chang SW, Pan WS, Lozano Beltran D, Oleyda Baldelomar L, Solano MA, Tuero I, *et al.* Gut hormones, appetite suppression and cachexia in patients with pulmonary TB. *PLoS One* 2013;8:e54564.
 5. Baracos VE. Pitfalls in defining and quantifying cachexia. *J Cachexia Sarcopenia Muscle* 2011;2:71-3.
 6. Fearon K, Strasser F, Anker SD, Bosaeus I, Bruera E, Fainsinger RL, *et al.* Definition and classification of cancer cachexia: An international consensus. *Lancet Oncol* 2011;12:489-95.
 7. Baracos VE. Cancer-associated cachexia and underlying biological mechanisms. *Annu Rev Nutr* 2006;26:435-61.
 8. Lieffers JR, Mourtzakis M, Hall KD, McCargar LJ, Prado CM, Baracos VE, *et al.* A viscerally driven cachexia syndrome in patients with advanced colorectal cancer: Contributions of organ and tumor mass to whole-body energy demands. *Am J Clin Nutr* 2009;89:1173-9.