

Vulnerable Groups and their Nutritional Needs

Correlates of nutrition risk among residents of naturally occurring retirement communities in Ontario, Canada

Christine M. Mills¹, Heather Keller^{2,3}, Vincent DePaul^{1,4}, Catherine Donnelly^{1,4}

¹School of Rehabilitation Therapy, Faculty of Health Sciences, Queen's University, Kingston, ON; ²Department of Kinesiology and Health Sciences, Faculty of Health, University of Waterloo, Waterloo, ON; ³Schlegel-UW Research Institute for Aging, Waterloo, ON; ⁴Health Services and Policy Research Institute, Faculty of Health Sciences, Queen's University, Kingston, ON.

Introduction: One-third of community-dwelling older adults in Canada are at nutrition risk, the risk of poor dietary intake and nutritional status. Consequences of nutrition risk include increased frailty, decreased quality of life, increased hospitalization, and higher mortality rates. Identifying correlates of nutrition risk may identify older adults who should be screened proactively for nutrition risk.

Objective: To examine correlates of nutritional risk among residents in seven different naturally occurring retirement communities (NORCs) in the province of Ontario, Canada.

Methods: Participants were recruited through convenience sampling at NORCs in Kingston, Belleville, Hamilton, and London, Ontario. Demographic data, health measures, and nutrition risk scores were collected. The following questionnaires were used: SCREEN-14 (nutrition risk), EQ-5D (health status), FRAST (falls risk), 3-item Loneliness Scale (loneliness), and GDS-15 (depression risk). Descriptive statistics were calculated for all variables. Spearman's rho and Pearson's correlation coefficient were calculated where appropriate.

Results: In total, 128 individuals were screened. Participants ranged in age from 51 to 97 (mean=77, SD=9.16). SCREEN-14 scores ranged from 19 to 62 (mean=45, SD=7.90) and 87.5% of participants were at nutrition risk (SCREEN-14 scores < 54). SCREEN-14 scores were significantly correlated with health status ($r=.98$, $p<.01$), falls risk ($\rho=-.324$, $p<.01$), and depression risk ($\rho=-.455$, $p<.01$), but not with loneliness.

Conclusions: Many residents of these seven NORCS in Ontario were at nutrition risk and may benefit from nutrition intervention. Participants who had a greater risk of falling, greater risk of depression, and lower health status had lower SCREEN-14 scores, indicating that these individuals were at increased nutrition risk.

Significance: Dietitians should be aware that nutrition risk may be common among NORC residents and nutrition risk screening can identify those who may benefit from nutrition intervention. In particular, older adults who are at a greater risk of falling, greater risk of depression, or who have poor health status should be screened for nutrition risk.

Funded by: Queen Elizabeth II Graduate Scholarship in Science and Technology (C. M. Mills) from Queen's University.