Dr. Shelley Walkerley is a Primary Health Care Nurse Practitioner (PHCNP) at the Stonegate Community Health Centre (CHC) in south Etobicoke, where she provides care in a general practice. She has had a specific clinical focus on smoking cessation, tuberculosis and other respiratory conditions. Her academic appointments include serving as the Site Coordinator for the PHCNP Program at York University and a sessional instructor in the same program at both York and Ryerson Universities. Dr. Walkerley’s educational background includes a Nursing Diploma from the Osler School of Nursing in Toronto, a BScN and PHCNP Certificate from York University and Masters of Nursing and PhD Nursing degrees from the University of Toronto.

Shelley Walkerley developed an interest in respiratory diseases initially when she was employed in the Chest Clinic at St. Michael’s Hospital in Toronto in the 1990s. The hospital, local community health agencies, and the City of Toronto Public Health Department developed an outpatient tuberculosis program in response to an identified need for accessible services for TB infection management and control among homeless persons in the downtown core. She was involved in that program for several years and has continued as an active member and current Co-Chair of the Ontario Lung Association TB Committee. She became interested in smoking cessation and tobacco control when she participated in the City of Toronto Public Health Department Heart Health Program in 2005. She started providing smoking cessation interventions as part of her general practice during that time. Stonegate Community Health Centre (CHC) was a founding member of the Primary Care Asthma Program and clinicians continue to provide comprehensives services for asthma, COPD, and nicotine addiction.

Dr. Walkerley’s research interests include nursing education, the role of nurses in primary care, and patient preferences for health promotion strategies. The study featured in Research Review was her doctoral thesis and she expects to publish some articles about this research within the next year. In addition, she is currently a co-investigator for a funded study examining the predictive capacity of admission essays for application to graduate nurse practitioner programs.

Shelley’s interests outside of work include her family, friends, and a variety of animal companions including horses, dogs and birds. She also volunteers on the Board of Directors of a Nurse Practitioner Led Clinic in Toronto.

Providing Smoking Cessation Interventions: A survey of nurses in primary health care settings in Ontario, Canada

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This study was completed to comply with the requirements for the degree of PhD, Graduate Department of Nursing Science, University of Toronto

Introduction: Nurses in primary care settings provide care to large numbers of patients who may smoke. There is evidence indicating that nurses provide effective smoking cessation interventions (Hall et al., 2007; Sidorov et al., 1997; Wewers et al., 2006). Despite the fact that evidence-based guidelines exist to help nurses provide effective interventions (Registered Nurses Association of Ontario, 2003; CNA, 2001; Katz et al., 2002), and nursing professional associations have stated that smoking cessation interventions are an expected component of nursing practice in all settings (CNA, 2001), available data indicate that nurses are not consistently offering smoking cessation interventions to patients who use tobacco (Wewers, Sarna and Rice, 2006). Results of surveys have described the barriers nurses encounter in providing smoking cessation interventions, such as lack of training, lack of time, and lack of...
space (Sarna et al., 2001) but most of the data come from acute care settings and ambulatory clinics, and from jurisdictions outside of Canada. As well, few of the existing studies were guided by a theoretical framework to explain the associations between these factors and the provision of interventions. More information is needed about how these factors are experienced in primary care settings so that appropriate initiatives can be designed to support nurses in participating more fully in this important public health initiative and more patients can have access to evidence-based smoking cessation interventions.

**Purpose:** The purpose of this cross-sectional study was to describe nurses' perceptions of factors that influence their intentions and practices related to providing smoking cessation interventions in primary health care settings. A conceptual framework derived from the Theory of Planned Behavior and relevant empirical literature guided the study.

**Methods:** A questionnaire measuring the concepts of interest was mailed to a random sample of Registered Nurses and Nurse Practitioners in Ontario, who were working in primary care settings, i.e., Community Health Centres, Family Health Teams, Aboriginal Health Access Centres, etc. Responses of 237 eligible participants, representing a 54.9% response rate, were available for analysis. Multiple regression analyses were used to examine the hypothesized relationships between nurses’ attitudes, subjective norms and perceived behavioural control, and their intention to implement smoking cessation interventions, and the association between intention and practice related to smoking cessation. Descriptive statistics describe the sample and qualitative content analysis was used to examine participants’ responses to open-ended questions regarding motivators and barriers to providing smoking cessation interventions in primary care settings.

**Results:** When asked to describe their nursing care related to 19 specific actions based on the ‘4A’s (Ask, Advise, Assist and Arrange), nurses reported that they were more likely to ask patients about their smoking status and to provide advice about the benefits of quitting, the risks of continued use of tobacco, and to advise patients to quit smoking or cut down on the amount they smoke. They were less likely to assist patients in quitting or to arrange follow-up appointments or referrals.

Overall the final regressions model explained 48.5% of variance in intention to provide smoking cessation interventions. The predictor variables attitude ($\beta = .213, p <0.01$), subjective norms ($\beta = .218, p <0.01$), and perceived behavioural control ($\beta = .343, p <0.01$) were significantly associated with a positive intention to provide smoking cessation interventions. In short, a positive attitude toward smoking cessation interventions, positive expectations of important others in the practice setting, and a higher perceived degree of control over their practice were significant contributors to nurses’ intentions to provide smoking cessation interventions to patients who smoked.

Several personal, professional and practice-related variables were entered into regression against intention, the dependent variable. These included age, education level, the presence of other health providers in the practice and physician reimbursement. Only preparation as an NP ($r = 0.301, p = 0.001$), working in a practice with a Social Worker ($r = -0.269, p = 0.001$), and working in a practice where MDs were paid extra to provide smoking cessation interventions ($r = 0.189, p = 0.001$) were significantly correlated with intention, but did not add to variance in intention in the regression analyses.

Time, training, access to resources and perceived patient readiness to quit were frequently reported to be motivators. Lack of time, lack of opportunity, lack of resources and lack of knowledge were identified as common barriers to the provision of smoking cessation interventions.
Clinical Relevance: In primary health care settings, nurses' intentions to provide smoking cessation interventions were related to a number of workplace factors such as role expectations, a defined, recognized and supported role in smoking cessation activities, and an organizational commitment to smoking cessation. Similar findings have been reported in other studies and pertain not only to nurses but to other providers as well (USDHHS, 2008; Schultz et al., 2006; Schultz, Hossain, and Johnson, 2009). Training, access to resources including written materials on smoking cessation and nicotine replacement therapy, and availability of cessation experts are important components of a committed organizational smoking cessation program; they have been suggested as key factors in motivating clinicians to become engaged in these practices (USDHHS, 2008).

Conclusions: This study adds to our knowledge about the nature of nursing practice related to smoking cessation in primary health care settings in Ontario and identifies specific issues that could be targeted in research, practice and education to improve the level of nursing engagement. Nurses held strong beliefs about the benefits of providing smoking cessation interventions to their patients who use tobacco but did not always have enough control over their role to allow them to engage in and fully implement these interventions. Nurses need the commitment and support of primary health care organizations if they are to fully realize their role in reducing the impact of tobacco use on the health of the people of this province.

Selected References


