



DESCRIBING THE OCCUPATIONAL SAFETY RISKS COMMONLY EXPERIENCED BY NURSES PROVIDING CARE IN PATIENT HOMES

Background

Patients are often discharged from the hospital to the community to complete their recovery process in their own homes. As advancements in health technologies allow for more complex care to be provided outside of hospitals, nurses are increasingly being called upon to support patient care in the community. However, providing care within the controlled environment of a hospital setting is vastly different compared to providing care in a patient’s home. From past occupational health and safety research, unique risks exist for nurses and other healthcare personnel providing care in patient homes.¹ If not adequately understood, these safety risks have the potential for both immediate harm to the healthcare provider and the patient by delaying care or reducing the quality of care that is able to be provided. This fact sheet will describe the frequency of different occupational hazards faced by visiting home care nurses in Ontario.

What did we do?

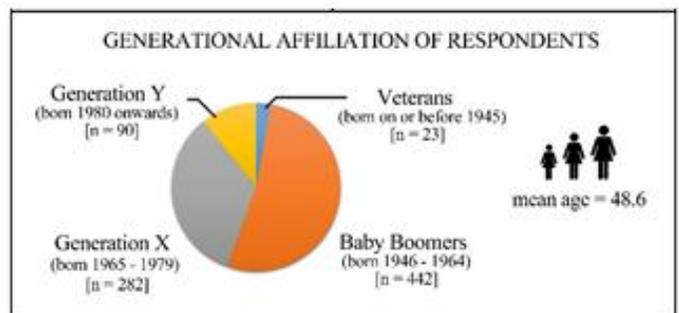
To explore which occupational hazards exist and are experienced by nurses providing home visits in the community, focus groups with homecare nurses were conducted as part of a larger research study. From these, a list of thirteen occupational risk items was identified. In a second homecare nursing survey study, Ontario homecare nurses were asked to identify the frequency of how often each occupational hazard was experienced in their daily work on a scale (0 = never, 1 = rarely, 2 = sometimes, 3 = regularly, 4 = always).

For each of the occupational risk items, frequency of occurrence was further analyzed

into two options, occurring uncommonly (nurses indicated as experienced either never, rarely, or sometimes) or commonly (nurses indicated as experienced either regularly or always).

To explore whether patterns of commonly experienced occupational safety risks differed between home visiting nurses with different personal characteristics, separate subgroup analyses using Chi-square tests were conducted for the following: gender, professional designation, age by generational affiliation, years of homecare nursing experience, and geographical location (rurality) of patients served. The figures below provide the breakdown of sample demographics.

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| <p>HOMECARE NURSE SAMPLE</p>  = 837 | <p>PROFESSIONAL DESIGNATION</p> <p>Registered Nurse = 60.6%</p> <p>Registered Practical Nurse = 39.4%</p> |
| <p>HOMECARE EXPERIENCE</p> <p>mean experience = 12.2 years</p> <p>< 5 years = 16.7%</p> <p>≥ 5 years = 83.3%</p> | <p>GENDER OF RESPONDENTS</p>  95%  5% |





* Most urban setting selected if nurse indicated practicing in multiple settings

Findings

As a whole group, nurses identified thirteen occupational safety risks that are commonly experienced (identified by at least one nurse as regularly or often). Of these, the top five reported exposures in their home visiting nursing practice are:

1. Aggressive / dangerous pets
2. Winter/night driving conditions
3. Ergonomic issues (e.g. lifting clients, bending over beds, desks, chairs, etc.)
4. Oxygen equipment/tanks
5. Environmental tobacco smoke

The remaining occupational safety risks from most to least frequently reported by homecare visiting nurses include:

6. Unsafe work conditions
7. Exposure to communicable disease
8. Unsafe neighbourhoods
9. Pests
10. Hazardous chemicals
11. Bullying / belittling / incivility by clients
12. Potential for violence from clients
13. Sexual harassment / abuse from clients

Subgroup Analysis

All top 5 safety issues identified by the whole group were reflected within the top 5 most frequently experienced risks for all subgroups.

Gender.

- Ergonomic issues were more often reported as a safety risk by females (63.4%) compared to males (42.9%).

Professional designation.

- No significant differences found between registered nurses and registered practical nurses in how often they experienced different occupational safety risks.

Generational Affiliation.

- Nurses belonging to more recent generations (Generation X and Generation Y) tended to report safety risks more often than earlier generations (Veterans and Baby Boomers).
- As generational affiliation moves from Veterans toward Generation Y, significant increases were found for the frequency of nurses reporting the following safety risks: dangerous pets, oxygen equipment/tanks, ergonomic issues, environmental tobacco smoke, unsafe neighborhoods, and pests.



Years of homecare nursing experience.

- Novice homecare nurses (31.4%) perceived an unsafe neighborhood as an occupational safety risk more often compared to more experienced homecare nurses (22.8%).
- Significant differences were found in how nurses felt they were treated while providing patient care. Novice nurses felt that they were regularly bullied, belittled, or treated with incivility by their clients more often than experienced nurses (9.3% vs 2.9%).

Geographical location (rurality).

- Winter and night driving conditions were more commonly reported as safety risks for nurses providing care in suburban areas (80.3%) compared to urban centres (72.1%) and rural areas (71.9%).
- Pets were more often identified as a safety risk for nurses providing care in rural and suburban areas (78.7% and 81.8%) than by nurses providing care in urban centres (70%).
- Oxygen equipment/tanks were reported as a safety risk most often by nurses practicing in suburban areas (58.3%) followed by rural areas (51.7%). Nurses providing care in urban centres reported this as a safety risk the least out of the three groups (42.5%).
- Nurses providing care in rural areas reported unsafe neighborhoods as a safety issue less frequently than nurses practicing in suburban and urban areas (7.9% vs 24.1% and 29.6%).

- Pests in patient homes were less frequently reported as an occupational safety risk by nurses providing care in rural areas compared to suburban and urban areas (9.0% vs 13.5% and 25%).

How can you use this information?

This study presents two important pieces of information that can be used by health administrators, policy makers, and home care agencies to improve safety for nurses providing care to patients in the community. First, the consistency of how often the same top five safety risks were identified indicates that they occur quite regularly for all nurses regardless of personal nursing characteristics or where care is being provided. This highlights the areas to which employers should pay particular attention to ensure that all nurses are adequately trained to recognize potential risks at work. Familiarizing the nurse with personal risk assessment tools such as the Brennan Scale² may help them better gauge potential risks of each unique home visit while providing care in the community.

While the top-rated occupational safety risks are ranked similarly across groups, some significant differences exist in how often different safety issues are reported between different groups of nurses. By highlighting and providing targeted training for the most likely safety risks that may occur based on personal nursing characteristics and assigned client locations, nurses may feel better prepared for handling safety risks when encountered in the community.

In some provinces, legislation surrounding lone workers has been created. There is recognition of the unique risks that employees experience



while working in isolation and suggest that employers are responsible to ensure processes are in place to minimize risk.³ Home care visiting nurses fit under these definitions of lone workers and have been observed to have a number of occupational safety risks associated with their roles. However, not all provinces have made special provisions in the labour laws surrounding the employer's duty toward lone worker employees. Using this research, policy makers can demonstrate the ongoing need for legislation to support the safety of the community/home visiting workforce in jurisdictions where they currently do not exist.

The demand for home care services are likely to increase with an aging population that prefer to stay in their homes as long as possible rather than receive institutional care.⁴ Promoting safety in the home care work environment is important to ensure the safety of currently employed nurses as well as to create the desirable working conditions that may assist with recruiting and retaining adequate supply of home care nurses to meet future needs.⁵

About the Researchers:

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Matthew is a PhD student investigating the use of electronic health records by interprofessional teams and its impact on collaborative practice and patient safety outcomes in homecare settings.

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Where can you find more information about this project?

Information regarding this project and other resources is available on www.tourangeauresearch.com and www.nhsru.com

¹ National Institute for Occupational Health and Safety. NIOSH hazard review: occupational hazards in home healthcare. Centre for Disease Control, 2010 0884-741X Contract No.: 4.

² Brennan W. Safer lone working: assessing the risk to health professionals. *Br J Nurs*. 2010;19(22):1428-30.

³ Workers Health and Safety Centre Federation of Ontario. Working Alone: It takes two ... workers (v.3)2015. Available from: <https://www.whsc.on.ca/Files/Resources/Hazard-Resource-Lines/Working-Alone-WHSC-Resource-Line.aspx>.

⁴ Canadian Institute for Health Information (CIHI). Health Care in Canada: A Focus on Seniors and Aging. 2011. Retrieved from: https://secure.cihi.ca/free_products/HCIC_2011_seniors_report_en.pdf

⁵ Tourangeau A, Patterson E, Rowe A, Saari M, Thomson H, MacDonald G, et al. Factors influencing home care nurse intention to remain employed. *Journal of nursing management*. 2014;22(8):1015-26