

European Nursing Congress

Support for a Continuing Research Agenda on
Restraints: Evidence from Europe and North
America

Perceptions of Canadian Nursing Home Staff on the Use of Physical Restraints

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October 5, 2016



ACKNOWLEDGMENTS



CANADA





BACKGROUND

- 2015: 14% of Canadian population is 65+
- 2036: 25% of Canadian population will be 65+
- About 7% of Canadians aged 65+ reside in health care institutions

BACKGROUND

- Physical restraint is defined as any action or procedure that prevents a person's free body movement to a position of choice and/or normal access to his/her body by the use of any method that is attached or adjacent to a person's body and that he/she cannot control or remove easily" (Bleijlevens, et al. 2016).
- The use of physical restraints is associated with adverse outcomes (Capezuti 2004; Castle and Mor, 1998).
- The use of physical restraints is still common practice in nursing home care of older people with dementia in Canada (Bleijlevens, 2008).
- More insight into the attitudes and opinions of nursing and caregiving staff regarding restraint measures is needed.



STUDY AIMS

The aim of this study was to explore attitudes of Canadian staff regarding restraint measures and restraint use in nursing home residents, and to investigate if attitudes are influenced by individual characteristics of nursing staff.



STUDY AIMS

Three research questions were formulated:

1. What are the attitudes of nursing staff regarding the use of physical restraints in Canadian nursing homes?
2. What are the opinions of nursing staff about the restrictiveness of physical restraint measures and discomfort in using these measures?
3. Are characteristics of nursing staff associated with attitudes regarding the use of physical restraints?



METHODS

Cross-sectional study, including a convenience sample of nursing staff employed in three long-term care (LTC) homes.

MEASUREMENT

- English version of the Maastricht Attitude Questionnaire (MAQ) on restraint use (Bleijlevens et al., 2012).
- Characteristics of staff (i.e., age, gender, position, and years of clinical experience).
- Two Parts of the MAQ:
 1. *22 items on three subscales: reasons for restraint use (8 items, alpha = 0.81), consequences of restraint use for the resident (10 items, alpha = 0.73), and appropriateness of restraint use (4 items, alpha = 0.65) (Hamers et al., 2007).*
 2. *14 items on opinions regarding the effect of restraint measures.*



DATA ANALYSIS

- Descriptive statistics were computed for the characteristics of the nursing staff and the scores on the questionnaires regarding self opinions.
- One-way ANOVAs conducted to investigate the effects of characteristics of nursing staff on the MAQ total and the MAQ sub-scales.

SAMPLE CHARACTERISTICS

	LTC 1	LTC 2	LTC 3	TOTAL SAMPLE
Mean age (\pm S.D)	37.2 + 10.4	42.7 + 10.5	46.2 + 12.0	41.9 \pm 11.3
Gender				
Female	19 (90.5%)	25 (96.2%)	20 (90.9%)	64 (93.0%)
Male	2 (9.5%)	1 (3.9%)	2 (9.1%)	8 (7.0%)
Years of Experience	9.5\pm6.3	12.7 \pm 6.6	12.9 \pm 8.6	11.8 \pm 7.3
Place of employment:				
Acute care hospital	0 (0.0%)	0 (0.0%)	1 (4.6%)	1 (2.0%)
Complex care facility	0 (0.0%)	0 (0.0%)	1 (4.6%)	1 (2.0%)
Nursing home/LTC facility	14 (70.0%)	14 (28.3%)	7 (31.8%)	35 (53.0%)
Transitional care unit	0 (0.0%)	1 (4.2%)	2 (9.1%)	3 (5.0%)
Dementia/Behavioral unit	5 (25.0%)	7 (29.2%)	10 (45.5%)	22 (33.0%)
Other	1 (5.0%)	0 (0.0%)	1 (4.6%)	2 (3.0%)
Retirement home	0 (0.0%)	2 (8.3%)	0 (0.0%)	2 (3.0%)
Job position:				
Nurse manager/Charge nurse	0 (0.0%)	0 (0.0%)	1 (4.6%)	1 (1.5%)
Director of care	1 (4.8%)	0 (0.0%)	0 (0.0%)	1 (1.5%)
Nurse educator	1 (4.8%)	1 (3.9%)	0 (0.0%)	2 (2.9%)
Licensed/Registered practical nurse	3 (14.3%)	3 (11.5%)	8 (36.4%)	14 (20.3%)
Registered nurse	1 (4.8%)	0 (0.0%)	1 (4.6%)	2 (2.9%)
Physiotherapist/Physical therapist	0 (0.0%)	1 (3.9%)	0 (0.0%)	1 (1.5%)
Physiotherapist assistant	0 (0.0%)	1 (3.9%)	0 (0.0%)	1 (1.5%)
Recreational therapist	3 (14.3%)	0 (0.0%)	1 (4.6%)	4 (5.8%)
Health care aide/PSW	10 (47.6%)	14 (53.9%)	8 (36.4%)	32 (46.4%)
Other	2 (9.5%)	6 (23.1%)	3 (13.6%)	11 (15.9%)

BIVARIATE RELATIONS BETWEEN OPINIONS AND CHARACTERISTICS OF NURSING STAFF

	MAQ total	p-value	Reason	p-value	Consequences	p-value	Appropriate	p-value
Age (y)		0.0709		0.2286		0.0099		0.3890
<40	2.93 (0.57)		2.96 (0.72)		2.78 (0.58)		3.32 (1.34)	
≥40	3.07 (0.61)		2.97 (0.76)		3.12 (0.75)		3.54 (1.32)	
Gender		0.3911		0.2406		0.6252		0.8940
Male	3.13 (0.56)		3.26 (0.80)		2.85 (0.38)		3.40 (1.52)	
Female	2.99 (0.58)		2.96 (0.71)		2.93 (0.66)		3.33 (1.32)	
Site		0.3841		0.3069		0.6860		0.3840
EM	3.02 (0.50)		3.12 (0.73)		2.81 (0.52)		3.18 (1.33)	
HH	2.87 (0.57)		2.79 (0.60)		2.92 (0.71)		3.23 (1.21)	
SP	3.07 (0.67)		3.02 (0.85)		2.95 (0.73)		3.78 (1.41)	
Experience (y)		0.1418		0.1347		0.3066		0.4010
<3	3.05 (0.51)		3.09 (0.78)		2.80 (0.45)		3.70 (0.82)	
3-10	n/a		n/a		n/a		n/a	
11-20	n/a		n/a		n/a		n/a	
21+	2.82 (0.75)		2.74 (0.94)		2.58 (0.88)		4.33 (1.21)	

OPINIONS OF NURSING STAFF REGARDING DEGREE OF RESTRICTIVENESS OF RESTRAINTS

Physical restraint	ON, Canada
Ankle restraint	2.58 (0.6)
Wrist restraint	2.46 (0.7)
Tight sheet	2.47 (0.8)
Vest restraint	2.51 (0.6)
Bedroom door locked	2.43 (0.8)
Belt	2.28 (0.6)
Chair on a board	2.27 (0.7)
Sleep suit	2.11 (0.7)
(Wheel)/(Geri) chair with a locked tray table	2.32 (0.7)
(Geri) chair preventing rising	2.23 (0.7)
Special sheet	1.86 (0.9)
Ward/unit door locked	2.08 (0.7)
Full length both sided bedrails	2.17 (0.6)
Camera surveillance	1.70 (0.9)
Infrared barrier alarm system	1.59 (0.6)
Sensor alarm	1.49 (0.6)
Full length one sided bedrail	1.46 (0.6)

OPINIONS OF NURSING STAFF REGARDING DISCOMFORT TO USE PHYSICAL RESTRAINT

Physical restraint	ON, Canada
Ankle restraint	2.70 (0.5)
Wrist restraint	2.57 (0.6)
Tight sheet	2.48 (0.7)
Vest restraint	2.49 (0.6)
Bedroom door locked	2.23 (0.8)
Belt	2.22 (0.8)
Chair on a board	2.22 (0.8)
Sleep suit	2.15 (0.8)
(Wheel)/(Geri) chair with a locked tray table	2.10 (0.8)
(Geri) chair preventing rising	2.03 (0.8)
Special sheet	2.00 (0.9)
Ward/unit door locked	1.84 (0.8)
Full length both sided bedrails	1.67 (0.7)
Camera surveillance	1.66 (0.8)
Infrared barrier alarm system	1.67 (0.8)
Sensor alarm	1.69 (0.7)
Full length one sided bedrail	1.29 (0.5)



CONCLUSION

- The study has shown that attitudes and opinions regarding the use of physical restraints differ between nursing staff in Canada.
- This study has revealed possible reasons for the reluctance to reduce physical restraints.
- The results of this study outline the importance of more tailored, culturally sensitive interventions to reduce physical restraints in nursing homes.

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