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https://doi.org/10.1016/j.jamda.2021.08.012

Nursing Home Managers' High Risk of Burnout

The tragic deaths of residents and staff during the COVID-19 pandemic called attention to the longstanding need for transformational change and redesign in nursing homes.[1,2] Stressors on the nursing home staff from increased workloads, to staffing shortages, and emotional strain were amplified.[3] Nursing home managers' retention is a known challenge. Factors influencing their intention to stay include work overload, inability to ensure high quality of care, insufficient resources, and a lack of perceived empowerment and recognition.[4] To tailor interventions to improve nursing home manager's quality of work life, we need a thorough understanding of the characteristics of this group. Our objective here is to describe manager characteristics in the Western Canadian nursing homes immediately prepandemic.

Methods

We completed a cross-sectional analysis of managers' questionnaire data collected between September 3, 2019, and February 28, 2020. Managers were from a random sample of 91 urban nursing homes in the 3 provinces of Alberta, Manitoba, and British Columbia. Ethics and operational approvals were obtained from participating organizations. Eligible managers (n=302) worked on 1 nursing home care unit for at least 50% of the time and for a minimum of 3 months. Means, standard deviations, frequencies, and percentages were used to describe the characteristics of the managers. Subgroup analyses were performed based on managers' role within their organization. Analyses were completed using SPSS.

Results

Of the 302 eligible nursing home managers in 91 nursing homes, 199 managers (65.9%) participated fully in the study (Table 1). Managers were predominantly female (90.4%), well educated (16.5% graduate/professional degree), and nurses (81.2%). Half (51.3%) reported being a unit manager and half identified as either a director of care or a facility administrator. Generally, a director of care or facility administrator has responsibility for the entire facility and a manager for 1 or more resident care units with the facility; sometimes managers have facility level responsibilities; occasionally a director of care covers both facility and units. A total of 19.6% of nursing home managers were ≥60 years of age. Managers worked an average of 72.79 hours in a 2-week period, with 16.6% working more than 80 hours. Facility administrators and directors of care worked significantly more hours than unit managers. Unit managers, however, compared to directors of care have reported completion of more specialized courses ($P = .031$).

Nursing home managers' job satisfaction was high—4.46 (0.55) with a range of 1-5. A total of 10.6% of managers reported high levels of emotional exhaustion and 16.7% high levels of cynicism. Conversely, a total of 76.7% reported high levels of professional efficacy. Facility administrators reported significantly greater efficacy compared with unit managers ($P = .040$).

Discussion

In this study, we found that most nursing home managers were female, middle-aged nurses who work full time. The fact that 16.6% of managers reported working overtime and approximately half reported moderate to high levels of emotional exhaustion and cynicism, yet high in their efficacy, indicates that managers are at significant risk for burnout. Emotional exhaustion—described as one's feelings of being emotionally overextended by one's work—among nursing home managers worldwide has been known to be high since the 1990s.[5] Given our results and the potential contributors—work overload, lack of time and support, and the need to manage staff conflicts—which were likely exacerbated by the pandemic, we anticipate burnout to be much higher post pandemic.

Nursing home managers critically influence work environments, staff outcomes, and quality of care for residents. Their workload and well-being can significantly impact their ability to oversee and support resident care,[5] yet they are often overlooked as vital care team members. Therefore, it is urgent that nursing home managers be recognized and their work be thoroughly examined and supported. Creating a culture of recognition and positive work environments for nurse managers in nursing homes through engagement, recognition, administrative support, and access to external health and social services warrants further exploration.[5,6] Limitations of this study are that survey responses are subject to self-report biases, and generalizations beyond the settings represented should be made with caution.

Acknowledgment

The authors acknowledge the Translating Research in Elder Care (TREC) 2.0 team for its contributions to this study.

Funding was provided by the Canadian Institutes of Health Research (CIHR), Canada and partners in the Ministries of Health in British Columbia, Alberta, and Manitoba, as well as regional health authorities in participating British Columbia and Alberta regions. The funders had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

The authors declare no conflict of interest.

Table 1
Characteristics of Nursing Home Managers in Canada

Variables	Unit Manager, n (%) (n = 102)	Director of Care, n (%) (n = 44)	Facility Administrator, n (%) (n = 53)	Total Managers, n (%) (N = 199)	ANOVA/χ^2	Post Hoc[†]
Age, y					$P = .48$	NA
<30	4 (3.9)	0	2 (3.8)	6 (3.0)		
30-39	20 (19.6)	9 (20.5)	10 (18.9)	39 (19.6)		
40-49	21 (20.6)	11 (25.0)	13 (24.5)	45 (22.6)		
50-59	39 (38.2)	18 (40.9)	13 (24.5)	70 (35.2)		
≥60	18 (17.7)	6 (13.6)	15 (28.3)	39 (19.6)		
Female	93 (92.1)	42 (95.5)	44 (83.0)	179 (90.4)	$P = .08$	NA
Nurse profession	87 (85.3)	41 (97.6)	32 (60.4)	160 (81.2)	$P < .0001$*	UM-FA, UM-DC
Education						
Diploma/certificate	72 (82.8)	34 (81.0)	38 (82.6)	144 (82.3)	$P = .97$	NA
Bachelor's degree	61 (66.3)	28 (66.7)	30 (62.5)	119 (65.4)	$P = .89$	NA
Master's degree	10 (13.5)	5 (13.2)	9 (22.5)	24 (15.8)	$P = .40$	NA
PhD/PharmD degree	1 (1.5)	0	0	1 (0.7)	$P = .58$	NA
Specialized courses completed (eg, Advanced Diploma in Gerontology)	33 (35.9)	26 (59.1)	24 (49.0)	83 (44.9)	$P = .031$*	UM-DC
Time worked in current role, mean (SD), y	7.07 (6.42)	5.75 (4.46)	6.02 (6.18)	6.50 (5.98)	$P = .38$	NA
<3	30 (29.4)	10 (22.7)	19 (35.8)	59 (29.7)		
3-9	43 (42.1)	27 (61.4)	22 (41.5)	92 (46.2)		
10-19	22 (21.6)	6 (13.6)	11 (20.8)	39 (19.6)		
≥20	7 (6.9)	1 (2.3)	1 (1.9)	9 (4.5)		
Time worked on unit, mean (SD), y	6.27 (6.4)	7.80 (7.5)	7.45 (7.64)	6.92 (7.01)	$P = .40$	NA
<2	26 (25.5)	9 (20.5)	8 (15.1)	43 (21.6)		
2-5	35 (34.3)	9 (20.5)	21 (39.6)	65 (32.7)		
6-9	19 (18.6)	12 (27.2)	12 (22.6)	43 (21.6)		
≥10	22 (21.6)	14 (31.8)	12 (22.6)	48 (24.1)		
Hours worked in 2 wk, mean (SD)	68.49 (18.20)	73.32 (20.80)	78.72 (16.72)	72.79 (18.75)	$P = .014$*	FA-UM
≤40	18 (17.7)	6 (13.6)	2 (3.8)	26 (13.1)		
41-60	9 (8.8)	3 (6.8)	6 (11.3)	18 (9.0)		
61-80	66 (64.7)	27 (61.4)	29 (54.7)	122 (61.3)		
>80	9 (8.8)	8 (18.2)	16 (30.2)	33 (16.6)		
Job satisfaction, mean (SD)[‡]	4.43 (0.58)	4.47 (0.54)	4.50 (0.53)	4.46 (0.55)	$P = .75$	NA
Burnout risk[§]						
Emotional exhaustion, mean (SD)	1.68 (1.31)	1.63 (1.31)	1.33 (1.03)	1.57 (1.24)	$P = .25$	NA
High	15 (14.9)	4 (9.1)	2 (3.8)	21 (10.6)		
Moderate	27 (26.7)	16 (36.4)	16 (30.2)	59 (29.8)		
Low	59 (58.4)	24 (54.5)	35 (66.0)	118 (59.6)		
Cynicism, mean (SD)	1.51 (1.27)	1.43 (1.24)	1.18 (1.01)	1.41 (1.20)	$P = .26$	NA
High	19 (18.8)	8 (18.2)	6 (11.3)	33 (16.7)		
Moderate	44 (43.6)	21 (47.7)	23 (43.4)	88 (44.4)		
Low	38 (37.6)	15 (34.1)	24 (45.3)	77 (38.9)		
Efficacy, mean (SD)	4.67 (0.99)	4.82 (0.92)	5.07 (0.81)	4.81 (0.94)	$P = .040$*	FA-UM
High	71 (71.0)	34 (77.3)	46 (86.8)	151 (76.7)		
Moderate	19 (19.0)	7 (15.9)	5 (9.4)	31 (15.7)		
Low	10 (10.0)	3 (6.8)	2 (3.8)	15 (7.6)		

ANOVA, analysis of variance; SD, standard deviation.

*$P < .05$, χ^2 test used for categorical variables and 1-way ANOVA for continuous variables.

[†]Post hoc test for significance were examined using the Bonferroni correction. UM, DC, FA denote the multiple comparison between nurse managers (UM = unit manager, DC = director of care, FA = facility administrator). Significant differences are provided between the nurse managers (eg, FA-UM implies a significant difference between facility administrators and unit managers). NA: not applicable/no significance found.

[‡]The score range for job satisfaction is 1 (strongly disagree) to 5 (strongly agree), with a higher score indicating a higher level of job satisfaction.

[§]A high risk for burnout is indicated by 1 or more of the following cutoffs: emotional exhaustion score greater than 3.00, cynicism score greater than 2.33, and efficacy score less than 3.30. A low risk for burnout is indicated by 1 or more of the following: emotional exhaustion score less than 1.67, cynicism score less than 1.00, and efficacy score greater than 4.00. The score range for emotional exhaustion, cynicism, and efficacy is 0 (never) to 6 (daily). In contrast to emotional exhaustion and cynicism, the efficacy scale was reverse-scored, so that higher scores indicate higher levels on all 3 scales.

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https://doi.org/10.1016/j.jamda.2021.08.045

Cognition Influences the Effects of Physical Exercise on Pain in Acute Hospitalized Older Adults

To the Editor:

Pain is a common and disabling condition in older adults and is associated with numerous adverse effects, such as functional or cognitive impairment, malnutrition, or depression.[1] Although pain usually has negative effects leading to prolonged hospital stays in older adults, limited evidence exists about the occurrence and development of pain in acute settings.[2]

Despite the fact that physical exercise has been proven safe and effective for preventing hospital-associated disability, the exercise-induced effects on self-reported pain as an agent that influences the hospitalization process has not been previously investigated in this population. Thus, the main aim of the present study was to understand the factors that could influence exercise-induced effects on pain in older patients admitted to a department of geriatrics.

The study is a secondary analysis of a randomized clinical trial (NCT02300896). Briefly, acutely hospitalized patients who met the inclusion criteria were randomly assigned to the intervention, and a trained research assistant provided a tailored exercise program. The primary results were published in 2019.[3]

The primary outcome was to analyze the changes in pain levels perceived by older patients after an exercise intervention during hospitalization, quantified using the Visual Analogue Scale (VAS) and how cognition could influence this relationship. In this extension study, mediation analysis was conducted to understand the influence of cognition on exercise-induced effects on pain and was performed according to the procedure proposed by Baron and Kenny.[4] A 5000 bootstrap resamples analysis was used to calculate the bias-corrected 95% confidence intervals (95% CIs) around the mediated and direct effects using the SPSS statistical procedure suggested by Preacher and Hayes[4] with the PROCESS v3.2 (www.processmacro.org) downloaded into SPSS v22 (IBM, Armonk, NY).

Of the 370 patients, 209 were women (56.5%), mean age (SD) was 87.3 (4.9) years and median length of stay was 8 days. The mean (SD) number of intervention days for each patient was 5.3 (0.5) days, with most training days being consecutive (97%).

When comparing both groups, pain perception quantified by the VAS showed an improvement of −1.03 points (−1.61 to −0.44), $P < .001$ in the intervention group. The effect of exercise on self-reported pain was mediated by changes in cognitive function (Figure 1). Compared with the usual-care group, the exercise intervention significantly improved self-reported pain ($\beta = -1.21$; 95% CI −1.96 to −0.46) (path c). Regarding the intervention effect on the moderator (path a), physical exercise improved cognition ($\beta = 1.52$, 95% CI 0.95–2.11). In the last regression model (path b), changes in the mini-mental state examination (MMSE) score ($\beta = 0.15$; 95% CI 0.01–0.29) were significantly associated with changes in self-reported pain perception (equation b). Finally, the mediation effects (a × b) and direct effects (path ć) were examined. Regression mediation analyses demonstrated that changes in the MMSE score ($\beta = -0.98$; 95% CI −1.70 to −0.26) significantly mediated the exercise intervention effect on pain and might directly contribute to explain the variance with 22% of the total effects.

An individualized exercise program seemed to reduce pain perception in hospitalized older adults, supporting the role of physical exercise as an effective therapy for pain management. Furthermore, this decrease appeared to be influenced by changes in cognition that exercise itself provided.

Pain perception is influenced by cognitive impairment and may have a negative impact on patient quality of life.[5] This impairment represents a major obstacle to daily activities and rehabilitation, especially in the chronic pain population. Furthermore, the presence of persistent pain reduces physiological reserve and predisposes patients to short- and long-term disability.[6] This clinical deterioration is greater when a stress event occurs, such as an acute hospitalization, especially in older individuals.

Physical exercise has been proposed as an effective treatment for pain management.[7] It is well known that exercise also improves cognition in older adults.[8] Our findings show that changes in cognition could influence the relationship between exercise-induced effects on self-reported pain in acutely hospitalized older patients. Thus, cognitive trajectory during hospitalization seems to play a key role in pain management in this population.[9] Exercise clearly influences the brain and has potential benefits on cognition,[10] but important questions remain regarding the effects of different interventions, such as the combination of physical exercise and cognitive training, in older patients admitted to an acute care for older persons unit for pain management.

In conclusion, an individualized physical exercise program seems to provide potential benefits for pain management in acutely hospitalized older adults. Furthermore, changes in cognitive function during the hospital stay influence the exercise-induced effects on pain perception.

Acknowledgments

Author Contributions: NMV, ML, FZ, and MI designed and performed research, analyzed data, and wrote the paper. AG, AC, and VR analyzed data.

The authors declare no conflicts of interest.

This study was funded by a Gobierno de Navarra project Resolución grant 2186/2014 and acknowledged with the “Beca Ortiz de Landázuri” as the best research clinical project in 2014, as well as by a research grant PI17/01814 of the Ministerio de Economía, Industria y Competitividad (ISCIII, FEDER). NM-V received funding from “la Caixa” Foundation (ID 100010434), under agreement LCF/PR/PR15/51100006.

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