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Changes in Health and Well-Being of Care Aides in Nursing Homes From a Pre-Pandemic Baseline in February 2020 to December 2021

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Abstract

Nursing homes were profoundly affected by the COVID-19 pandemic, influencing work outcomes of care aides who provide the most direct care. We compared care aides' quality of work life by conducting a repeated cross-sectional analysis of data collected in February 2020 and December 2021 from a stratified random sample of urban nursing homes in two Canadian provinces. We used two-level random-intercept repeated-measures regression models, adjusting for demographics and nursing home characteristics. 2348 and 1116 care aides completed the survey in February 2020 and December 2021, respectively. The 2021 sample had higher odds of reporting worked short-staffed daily to weekly in the previous month than the 2020 sample. The 2021 sample also had a small but significant drop in professional efficacy and mental health. Despite the worsening changes, our findings suggest that this workforce may have withstood the pandemic better than might be expected.

Keywords

quality of life, workplace, nursing assistants, nursing homes, COVID-19 pandemic

What this paper adds

- Care aides reported lower levels of professional efficacy and mental health in December 2021 (21 months into the pandemic) than in February 2020 (immediately prior to the pandemic).

Applications of study findings

- Ongoing monitoring is essential to ensure small trends observed in our study do not worsen, a situation that could escalate quickly to a workforce crisis of significant proportions.

Introduction

Residential long-term care (LTC) including nursing homes has been and continues to be deeply affected by the COVID-19 pandemic. Many studies reveal the nature and extent of traumatic stress experienced by residents, staff, and residents' families (Cohen-Mansfield & Meschiany, 2022; Reynolds et al., 2022). Care aides (also called personal support workers or nursing assistants) comprise the majority of the workforce in Canadian nursing homes and provide at least 80% or more of direct care (Chamberlain et al., 2019). This workforce is unregulated and often faces high workloads, insufficient baseline staffing resources, and increasingly complex care needs of residents (Reynolds et al., 2022). Canadian care aides are often immigrants who do not speak English as their first language, are often middle-aged women, and frequently

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work multiple jobs to make ends meet (Chamberlain et al., 2019; Duan et al., 2020; Song et al., 2020a).

Researchers have reported how the COVID-19 pandemic has affected LTC staff quality of work life, such as high caregiver burden (Reynolds et al., 2022), significant anxiety (Riello et al., 2020), and traumatic stress (Blanco-Donoso et al., 2021). Poor LTC preparedness placed direct care staff at unnecessary risk, with many nursing homes lacking an adequate supply of personal protective equipment in the early months of the pandemic (Blanco-Donoso et al., 2021). Care aides experienced frequent symptoms of moral distress as they weighed their own safety against their obligation to perform their vital role in resident care (Arble et al., 2021; Iaboni et al., 2022). Chronic staff shortages in this care sector were heightened by staff sickness which further exacerbated the work stress for remaining workers (Havaei et al., 2022). Burnout is highly prevalent among care aides (Leskovic et al., 2020; Navarro Prados et al., 2022) and is linked to poor staff retention (White et al., 2021) reflected by high turnover early in the pandemic and sustained depleted staff resources as the pandemic continued (Frogner & Dill, 2022).

This knowledge about the healthcare workforce often combines findings for care aides with other staff groups (Arble et al., 2021; Havaei et al., 2022; Reynolds et al., 2022) or focuses solely on licensed clinicians such as registered nurses (Havaei et al., 2022; Leskovic et al., 2020). Our understanding of how COVID-19 has influenced frontline healthcare workers in any setting is lacking given the absence of routinely collected data to assess carer health and work outcomes. Findings specific to LTC care aides is required given this group's unique care context and responsibilities. The existing knowledge in this area is also largely generated from convenience samples, sometimes from one home (Havaei et al., 2022), and have long intervals between data collection episodes (Leskovic et al., 2020). Here, our aim was to compare care aides' demographics and quality of work life from immediately preceding the COVID-19 pandemic in February 2020 to December 2021 during the pandemic.

Methods

Study Design

We completed repeated cross-sectional analyses of data from two waves of surveys completed in February 2020 (immediately pre-pandemic; Time 1) and again in December 2021 (21 months into the pandemic; Time 2).

Setting

We sampled care aides in nursing homes in urban areas of Alberta and Manitoba, Canada. Participating nursing homes were registered by the provincial government and randomly selected based on strata defined by (1) health region (Edmonton and Calgary Zones in Alberta and the Winnipeg Regional Health Authority in Manitoba), (2) facility size (small, <80 beds; medium, 80–120 beds; large, > 120 beds), and (3) owner-operator model (public nonprofit, private for-profit, and voluntary nonprofit). The names of all nursing homes in Alberta and Manitoba were publicly available on government websites. For each health region, we generated the list of eligible nursing homes based on the owner-operator model and size of nursing homes. A random number generator was used to create final lists of selected nursing homes. The provincial lead investigators used these lists and followed a standardized procedure for recruitment, and if needed, replacement of nursing homes.

Participants

Care aides were invited to participate if they had worked in a study facility for longer than 3 months, could identify a unit where they worked for at least 50% of their time, and worked on that unit for 6 or more shifts in the past month. Care aides completed structured computer-assisted personal interviews administered by trained interviewers during work hours (Estabrooks et al., 2009). During computer-assisted personal interviews, interviewers read survey questions aloud to care aides and entered their responses directly into a computer survey application predesigned specifically for our research study (Estabrooks et al., 2009). Interviews were in person at Time 1 and were completed virtually using the Zoom platform at Time 2 because of COVID restrictions in the nursing homes.

Ethics

This study was approved by the Research Ethics Board at the Universities of Alberta (Pro00037937) and Manitoba (H2014:164). Participating organizations provided operational approvals. Written informed consent was obtained from care aides prior to data collection.

Measures

Table 1 summarizes variables and measures used in this study. Our research team has been collecting a range of measures related to care aides' quality of work life. Based on current pandemic reports, we selected from these measures the ones that might be influenced by the COVID-19 pandemic and assessed differences in the selected measures from prior to the pandemic to December 2021. Specifically, our research team developed, piloted, and validated the questions for perceptions of working short-staffed, care tasks left undone, and rushed care tasks (Knopp-Sihota et al., 2015; Song et al., 2020b). We measured burnout with the Maslach Burnout Inventory (Barnett et al., 1999; Beckstead, 2002), job satisfaction with the adapted version of the Michigan Organizational Assessment Questionnaire Job Satisfaction Sub-scale

Table 1. Summary of Measures.

Variable	Description	No. of Items	Scoring
Independent variable			
Data collection wave	Time when data collection occurred	1	Binary: February 2020, December 2021
Dependent variables: Care aide quality of work life			
Work short-staffed	Respondent feels working short-staffed	1	Binary: Every day to weekly, monthly to never
Hours worked in two weeks	Number of hours that respondent worked in the past two weeks	1	Continuous
Number of care tasks left undone	Number of care tasks (e.g., taking residents for a walk, talking with residents, performing mouth care, toileting, bathing, feeding, dressing, and preparing residents for sleep) that were left undone during respondent's most recent shift	8	Count: 0–8
Number of rushed care tasks	Number of care tasks (e.g., talking with residents, performing mouth care, toileting, bathing, feeding, dressing, and preparing residents for sleep) that were rushed during respondent's most recent shift	7	Count: 0–7
Number of responsive behaviors by residents	Number of responsive behaviors (e.g., yelling, biting, and sexual touching) that care aides experienced from residents in their most recent 5 shifts	1	Count: 0–6
Burnout (measured with the Maslach Burnout Inventory [MBI], 9-item short form)			
MBI emotional exhaustion	Respondent feels emotionally exhausted, strained	3	Continuous: Mean of 7-point (0–6) Likert scale (never to daily)
MBI cynicism	Respondent feels cynical, that their work does not contribute to anything	3	Continuous: Mean of 7-point (0–6) Likert scale (never to daily)
MBI efficacy	Respondent feels their work is meaningful, has a sense of accomplishment	3	Continuous: Mean of 7-point (0–6) Likert scale (never to daily)
Job satisfaction (measured with the Michigan organizational assessment questionnaire job satisfaction sub-scale)	Respondent satisfied with the current job	3	Continuous: Mean of 5-point (1–5) Likert scale (strongly disagree to strongly agree)
Health status (measured with the 8-item short form survey)			
Physical health	Respondent's perception of their own physical health in the most recent 4 weeks	8	Continuous: Scoring of items on 5- or 6-point Likert scales based on scale developers' algorithm
Mental health	Respondent's perception of their own mental health in the most recent 4 weeks		
Care aide demographics			
Age	Respondent's age, years	1	Categorical: <30, 30–39, 40–49, 50–59, ≥60
Sex	Respondent's sex	1	Binary: Female, male, other[a]
English as first language	English is respondent's first language	1	Binary: Yes, No
Shift worked most often	Shift the respondent works most often	1	Categorical: Day, evening, night
Completed care aide certificate	Care aide certificate obtained	1	Binary: Yes, No
Completed high school	Care aide completed high school	1	Binary: Yes, No
Years in current role	Number of years respondent has worked as a care aide	1	Continuous
Years in current unit	Number of years respondent has worked on the current care unit	1	Continuous

(continued)

Table 1. (continued)

Variable	Description	No. of Items	Scoring
Unit characteristics			
Unit type	Type of care unit on which the care aide works at least 50% of their time	1	Categorical: General long-term care, secure dementia, non-secure dementia, mental health, others
Scheduled staffing: Care aide care hours per resident day	Number of hours scheduled for care aides per resident day	1	Continuous
Scheduled staffing: Total care hours per resident day	Number of hours scheduled for registered nurses, licensed practical nurses, and care aides per resident day	1	Continuous
Work environment (measured with the Alberta context tool)			
Leadership	Actions of formal leaders in an organization (unit) to influence changes and excellence in practice. Items generally reflect emotionally intelligent leadership	6	Mean of items on a 5-point Likert scale (strongly disagree to strongly agree)
Culture	The way that "we do things" in our organizations and work units. Items generally reflect a supportive work culture	6	Mean of items on a 5-point Likert scale (strongly disagree to strongly agree)
Evaluation	The process of using data to assess group/team performance and to achieve outcomes in organizations or units	6	Mean of items on a 5-point Likert scale (strongly disagree to strongly agree)
Formal interactions	Formal exchanges between individuals working within an organization (unit) through scheduled activities that can promote the transfer of knowledge	4	5-point Likert frequency scale (never to almost always). Recode 0 = no interaction, 1 = interaction. Take a count of recoded items
Informal interactions	Informal exchanges between individuals working within an organization (unit) that can promote the transfer of knowledge	9	5-point Likert frequency scale (never to almost always). Recode 0 = no interaction, 1 = interaction. Take a count of recoded items
Social capital	Structural elements of an organization (unit) that facilitate the ability to assess and use knowledge	7	5-point Likert frequency scale (never to almost always). Recode 0 = no resource, 1 = resource. Take a count of recoded items
Structural resources	Stock of active connections among people. These connections are of 3 types: Bonding, bridging, and linking	6	Mean of items on a 5-point Likert scale (strongly disagree to strongly agree)
Organizational slack—staff	Cushion of actual or potential resources that allows an organization (unit) to adapt successfully to internal pressures for adjustments or to external pressures for changes	3	Mean of items on a 5-point Likert scale (strongly disagree to strongly agree)
Organizational slack—space		2	Mean of items on a 5-point Likert scale (strongly disagree to strongly agree)
Organizational slack—time		4	Mean of items on a 5-point Likert scale (strongly disagree to strongly agree)
Nursing home characteristics			
Owner-operator model	Ownership model of the nursing home	1	Categorical: Public not-for-profit, voluntary not-for-profit, private for-profit
Size	Number of beds in the nursing home	1	Categorical: Small (≤79 beds), medium, (80–120 beds), large (>120 beds)
Province	The province where the nursing home was located	1	Categorical: Alberta, Manitoba

[a]The variable sex did not have the "Other" option in the February 2020 data collection. The option was added in December 2021.

Table 2. Demographics of Care Aides and Characteristics of Care Units and Nursing Homes.

	February 2020 Cohort (n = 2348)	December 2021 Cohort (n = 1116)	
Care Aide Demographics	No. (%)	No. (%)	p
Participation in data collection			/
Both waves	337 (14.4)	337 (30.2)	
One wave	2011 (85.6)	779 (69.8)	
Age			.019
<30 years	147 (6.3)	72 (6.5)	
30–39 years	498 (21.2)	206 (18.5)	
40–49 years	768 (32.7)	351 (31.5)	
50–59 years	638 (27.2)	322 (28.9)	
≥60 years	297 (12.6)	165 (14.8)	
Sex[a]			.89
Male	250 (10.6)	120 (10.8)	
Female	2097 (89.3)	992 (88.9)	
Other	[a]	3 (.3)	
Missing	1 (.0)	1 (.1)	
English as first language			.32
Yes	659 (28.1)	271 (24.3)	
No	1689 (71.9)	844 (75.6)	
Missing	—	1 (.1)	
Shift			.042
Day	1141 (48.6)	563 (50.4)	
Evening	887 (37.8)	449 (40.2)	
Night	320 (13.6)	104 (9.3)	
Completed care aide certificate			.10
Yes	2131 (90.8)	1033 (92.6)	
No	217 (9.2)	34 (3.0)	
Missing	—	1 (.1)	
Completed high school			.42
Yes	2266 (96.5)	1081 (96.9)	
No	82 (3.5)	34 (3.0)	
Missing	—	1 (.1)	
	Mean (SD)	Mean (SD)	
Years in current role	12.2 (8.8)	12.7 (9.1)	<.001
Years in current unit	6.6 (6.4)	6.9 (6.8)	.001

	February 2020 Cohort (n = 189)	December 2021 Cohort (n = 139)	
Unit Characteristics	No. (%)	No. (%)	p
Participation in data collection			/
Both waves	130 (68.8)	130 (93.5)	
One wave	59 (31.2)	9 (6.5)	
Unit type			.96
Secure dementia	28 (15)	22 (16)	
Non-secure dementia	7 (4)	8 (6)	
General long-term care	142 (75)	96 (69)	
Secure mental health/psychiatric	2 (1)	2 (1)	
Other	10 (5)	11 (8)	
	Mean (SD)	Mean (SD)	
Scheduled staffing: Care aide hours per resident day	1.9 (.7)	2.1 (.8)	.001
Scheduled staffing: Total hours per resident day by care aides and nurses	2.8 (.9)	3.0 (1.0)	<.001

(continued)

Table 2. (continued)

Unit Characteristics	February 2020 Cohort (n = 189) No. (%)	December 2021 Cohort (n = 139) No. (%)	p
Work environment			
Leadership	4.0 (.2)	4.0 (.2)	.83
Culture	4.1 (.2)	4.1 (.3)	.89
Evaluation	3.8 (.2)	3.8 (.3)	.43
Formal interactions	1.5 (.4)	1.5 (.4)	.28
Informal interactions	4.2 (.7)	4.1 (.8)	.46
Social capital	4.1 (.2)	4.0 (.2)	.002
Structural resources	2.8 (.6)	2.7 (.8)	.084
OS Staff	2.9 (.5)	3.0 (.6)	.064
OS Space	3.7 (.7)	3.6 (.7)	.004
OS Time	3.5 (.4)	3.5 (.4)	.94

Nursing Home Characteristics	February 2020 Cohort (n = 50) No. (%)	December 2021 Cohort (n = 38) No. (%)	p
Participation in data collection			/
Both waves	37 (74.0)	37 (97.4)	
One wave	13 (26.0)	1 (2.6)	
Facility owner-operator model			.99
Public not for-profit	9 (18)	8 (21)	
Private for-profit	18 (36)	11 (29)	
Voluntary not for-profit	23 (46)	19 (50)	
Facility size			.41
Small (<80 beds)	9 (18)	9 (24)	
Medium (80–120 beds)	15 (30)	8 (21)	
Large (>120 beds)	26 (52)	21 (55)	
Province			.21
Alberta	34 (68)	28 (74)	
Manitoba	16 (32)	10 (26)	

Notes. Comparisons used repeated-measures regression models to control for certain care aides participating in both waves of data collection. Thirteen nursing homes from the February 2020 cohort did not participate in 2021. However, in December 2021, we were able to include an additional nursing home that did not participate in February 2020. Therefore, the difference was 12 nursing homes (as described in the Result section).
OS = Organizational Slack, SD = standard deviation.
[a]The variable sex did not have the "Other" option in the February 2020 data collection. The option was added in December 2021.

(Ginsburg et al., 2016; Schleicher et al., 2010), physical and mental health with the 8-item Short Form Survey (Ware et al., 2001).

Statistical Analyses

We calculated frequency and percentage for categorical variables and mean and standard deviation for continuous variables. To compare care aide demographics and characteristics of resident care units and nursing homes at the two time points, we used repeated-measures regression models to account for certain care aides participating in both waves of data collection. Less than .1% of data were missing for all variables and we used listwise deletion for missing data.

To compare care aides' quality of work life at the two time points, we used two-level random-intercept repeated-measures regression models to account for repeated measures and care aides nested within same care units (Norton et al., 2014). Outcomes were also adjusted for first language and shift of care aides, and owner-operator model, size, and province of nursing homes (sampling strata). All analyses were performed in SAS, version 9.4.

Results

Comparison of Sample Characteristics at Time 1 and Time 2

As Table 2 shows, 2348 care aides (with a response rate of 64.65%) in 50 nursing homes and 1116 care aides (with a response rate of 38.03%) in 38 nursing homes completed the survey at Time 1 and Time 2, respectively. Of the participants,

Table 3. Comparison of Quality of Work Life for Care Aides in February 2020 Versus December 2021.

	February 2020 (n = 2348)	December 2021 (n = 1116)		
Quality of work life outcome	No. (%)	No. (%)	OR (95% CI)	p
Work short-staffed				
Monthly to never (reference)	1285 (54.8)	522 (46.9)	1	
Every day to weekly	1060 (45.2)	590 (53.1)	1.36 (1.18, 1.58)	<.001
Missing	3 (.1%)	4 (.4%)		
	Mean (SD)	Mean (SD)	Coefficient (95% CI)	p
Hours worked in two weeks	58.0 (18.6)	63.3 (17.4)	6.11 (4.90, 7.32)	<.001
Number of care tasks left undone	1.69 (2.2)	1.61 (2.0)	−.16 (−.30, −.02)	.027
Number of rushed care tasks	2.97 (2.8)	2.68 (2.7)	−.32 (−.49, −.14)	<.001
Number of responsive behaviors by residents	3.2 (1.7)	3.0 (1.7)	−.18 (−.29, −.07)	.002
MBI cynicism	2.7 (1.6)	2.5 (1.6)	−.12 (−.23, −.01)	.028
MBI exhaustion	2.7 (1.7)	2.8 (1.6)	.08 (−.03, .19)	.16
MBI efficacy	5.4 (.9)	5.2 (1.0)	−.18 (−.24, −.12)	<.001
Job satisfaction	4.3 (.6)	4.3 (.6)	−.03 (−.07, .01)	.14
SF-8 physical health	48.6 (8.2)	48.3 (8.0)	−.39 (−.92, .15)	.16
SF-8 mental health	51.8 (8.6)	50.0 (8.8)	−1.8 (−2.4, −1.2)	<.001

Notes. Two-level random-intercept repeated-measures regression models controlled for repeated measures, the clustering effect of care aides working in the same care units, as well as covariates (first language and shift of care aides, and owner-operator model, size, and province of nursing homes).
CI = confidence interval, MBI = Maslach Burnout Inventory, OR = odds ratio, SD = standard deviation, SF-8 = Short Form-8.

337 care aides participated in both Time 1 and Time 2 of data collection. Scheduled care aide staffing and total staffing (care aides and nurses) for care units were both higher at Time 2. The work environment reported by care aides remained unchanged between the two time points, except that social capital and organizational slack (space dimension) were lower at Time 2.

Comparison of Quality of Work Life at Time 1 and Time 2

Table 3 presents comparisons for care aides at Time 1 and Time 2. Compared to care aides at Time 1, care aides at Time 2 had 36% higher odds (OR: 1.36, 95% CI: 1.18–1.58) of reporting having worked short-staffed daily to weekly in the previous month. On average, care aides reported lower professional efficacy (−.18, 95% CI: −.24 - −.12) and mental health (−1.8, 95% CI: −2.4 - −1.2) at Time 2. They reported working an average of 6.11 more hours (95% CI: 4.90 – 7.32) in 2 weeks at Time 2. Also, at Time 2 versus Time 1, care aides reported being less rushed when completing select essential tasks (−.32, 95% CI: −.49 - −.14), and fewer responsive behaviors from residents (−.18, 95% CI: −.29 - −.07). No significant changes were observed in job satisfaction, physical health, or the emotional exhaustion subscale of burnout. A small improvement was reported in the burnout sub-scale of cynicism. All changes, including statistically significant ones, were relatively small.

Discussion

In this study, we compared care aides' reports of work life outcomes from February 2020 to December 2021. Prior reports documented that LTC staff experienced significant burden, anxiety, and traumatic stress during the pandemic (Blanco-Donoso et al., 2021; Reynolds et al., 2022; Riello et al., 2020). While these studies suggest a near crisis among care aides during the pandemic, our findings suggest that care aides may have weathered the first 18 months of the pandemic relatively well—keeping in mind that pre-pandemic scores on a number of measures (i.e., burnout) were high.

A small, but significant drop in professional efficacy (a burnout sub-scale) is worth noting as care aides have historically reported extremely high levels. In previous studies, we suggest that very high efficacy acted as a potential protecting attribute to burnout despite reporting high levels of emotional exhaustion and cynicism (the other sub-scales of burden) (Chamberlain et al., 2019; Song et al., 2020a). The importance of this drop in professional efficacy will not be clear until we have later pandemic assessments. Possibilities for this change may be that the pandemic worsened already concerning levels of working short-staffed, contributed to increased hours worked, and exerted negative effects in mental health and on social capital (which captures important aspects of teamwork). These coupled with personal fears relating to infection of self and family might have exerted important but temporary effects on professional efficacy that will lessen over time. It could also mean that care aides have

been under sufficient stressors contributing to longer term effects on their ability to cope and sense that their work has meaning. The latter would be more ominous suggesting that this workforce could be close to or at its limits of coping. Ongoing monitoring is essential to ensure small trends observed in our study do not worsen, a situation that could escalate quickly to a workforce crisis.

Lower numbers of rushed care tasks and responsive behaviors, while seemingly counterintuitive, may reflect pandemic anomalies. For instance, factors, such as visitation restrictions due to the pandemic and fewer resident transfers to acute care settings (Cohen-Mansfield & Meschiany, 2022; Reynolds et al., 2022) might have reduced interruptions to staff's workflow and protected them from leaving care undone. Historically, we have observed quite high levels of missed care (Song et al., 2020b, 2023).

Social capital, a measure of active connections and teamwork among care staff, was significantly lower in December 2021 compared to February 2020. Having less time to engage with other care aides as supported by self-reports of working short-staffed as well as the requirements to wear masks (Reynolds et al., 2022)) made communication more difficult and may have limited their opportunities to connect with co-workers. Not surprisingly, organizational slack, including perceptions of available space also decreased. Public health directives regarding distancing restrictions affected the space available to care aides to carry out their responsibilities likely contributed to this outcome (Reynolds et al., 2022).

In a different study, this research team assessed changes in health and well-being of the manager group (e.g., unit care managers, nursing home managers) sampled at the same time from the same Albertan nursing homes (Estabrooks et al., 2023; Savage et al., 2022). In the manager study, we observed statistically lower levels of job satisfaction and mental health and higher levels of cynicism and emotional exhaustion in December 2021 than pre-pandemic. Based on findings from the manager group, care aides in the current study have withstood the first 18 months of the pandemic better than the manager group. In an interconnected system such as a nursing home, we need to monitor the health and well-being *of all occupational groups*. Without stable and resilient managers in nursing homes, other staff groups cannot carry on indefinitely without negative impact.

Our study has a number of limitations. Although the nursing home characteristics were similar in both waves, 13 nursing homes included in Time 1 declined to participate in Time 2 (Table 2), largely due to the still overwhelming demands of COVID-19. The nursing homes dropping from Time 2 data collection might have contributed to the observed differences in care aide outcomes, as supported by the relatively large percent of variance in care aide outcomes explained by nursing home factors (Supplemental Table 1). The care aide response rate for participating nursing homes was much lower at Time 2. A selection bias may have been present. Alternative approaches to analyzing the data are possible, for example, using a linked cohort of care aides who participated in data collection at both time points. We are able to identify this sub-group of care aides ($n = 337$) with the unique identifier assigned to each participant during data collection. Care aide demographic characteristics were, however, similar at both time points. The study is susceptible to bias from self-report measures. In addition, the demographics of care aides in our study might differ in important ways from those working in other Canadian provinces or nursing homes from non-Canadian contexts. For example, over 85% of our care aide sample were born outside Canada, while in the US, approximately 21% of care aides (more commonly called nursing assistants) in nursing homes were immigrants (Paraprofessional Healthcare Institute, Inc., 2021). The demographics of our participants and the methodological limitations of this study suggest that generalization of our findings to settings and people with characteristics different from ours should be made with caution.

Conclusions

Care aides are an essential and major part of the care system in nursing homes. During highly challenging times such as the COVID-19 pandemic, they were heavily relied upon to get through tough times without much change in support. Prior to the pandemic, we had observed significant stability in measures of physical and mental health and quality of work life (job satisfaction, burnout) over a 15-year period (Chamberlain et al., 2019), making even small changes now more worrisome than they might otherwise be. We may be observing small changes that signal a worsening trend—or, further assessment post-pandemic may reveal a return to pre-pandemic levels. Regardless, our study results show that the relative stability of care aide measures from a pre-pandemic baseline to December 2021 point to a workforce that has withstood the pressures of COVID, at least during the first 18 months, better than might have been expected.

Author Contributions

YS, JMK, PN, JS, and CE made substantial contributions to the conception and design of the study. YS and JMK analyzed data, and the whole team contributed to the interpretation of results. JMK, YS, AD, BG, and YD drafted the manuscript, with all co-authors contributing substantively to multiple versions of the manuscript. All authors approved the final version of the manuscript.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Ethics Approval

This study was approved by the Research Ethics Board at the Universities of Alberta (Pro00037937) and Manitoba (H2014:164).

Sponsors' Roles

The sponsors were not involved in the design or implementation of the study.

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Supplemental Material

Supplemental material for this article is available online.

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