Introduction

The need for profound, systemic change in the nursing home sector has been clear for decades.\(^1\) The coronavirus disease 2019 pandemic has exacerbated existing deficiencies in the sector.\(^2,3\) Care aides (called certified nursing assistants in the US) provide up to 90% of direct care in Canadian nursing homes.\(^4\) They are both a neglected and socioeconomically disadvantaged workforce, as well as a critical source of emotional and social support for residents.\(^4,5\) Our objective is to describe care aides’ characteristics and quality of work life in Western Canadian nursing homes.

Methods

This is a cross-sectional analysis of care aide survey data collected between September 3, 2019, and February 28, 2020.\(^4\) The study was approved by research ethics boards at University of Alberta, University of British Columbia, and University of Manitoba. Operational approvals were obtained from participating organizations. Participants completed written informed consent. This study follows the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guideline.

Care aides were from urban facilities, selected according to stratified random sampling (health region, owner-operator, and bed size). Trained interviewers collected data using structured interviews.\(^4\) Eligible care aides had worked in a facility more than 3 months, could identify a unit where they worked for at least 50% of their time, and had worked on that unit for 6 or more shifts in the past month.

Table 1. Characteristics of Nursing Home Care Aides

| Characteristic                             | Care aides, No. (%) (N = 3765) |
|--------------------------------------------|---------------------------------|
| Age, y                                     |                                 |
| <30                                        | 318 (8.45)                      |
| 30–39                                      | 815 (21.65)                     |
| 40–49                                      | 1186 (31.50)                    |
| 50–59                                      | 1019 (27.07)                    |
| ≥60                                        | 427 (11.34)                     |
| Female                                     | 3359 (89.22)                    |
| Care aide certificate                       | 3526 (93.65)                    |
| English as an additional language          | 2571 (68.29)                    |
| Shift worked most of the time              |                                 |
| Day                                        | 1909 (50.70)                    |
| Evening                                    | 1381 (36.68)                    |
| Night                                      | 475 (12.62)                     |
| Experience, median (interquartile range), y|                                 |
| On unit                                    | 4 (1.33–9.50)                   |
| As care aide                               | 10 (5–17)                       |
| Nursing homes worked in, No.               |                                 |
| 1                                          | 2848 (75.64)                    |
| ≥2                                         | 915 (24.30)                     |

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Table 2. Work-Related Outcomes for Nursing Home Care Aides

| Variables                                                                 | Care aides, No. (%) |
|---------------------------------------------------------------------------|---------------------|
| **Responsive behaviors experienced from residents in last 5 shifts**      |                     |
| Yelling and screaming                                                     | 3240 (86.06)        |
| Hurtful remarks or behaviors                                              | 2742 (72.83)        |
| Being spit on, bitten, hit, pushed, or pinched                           | 2392 (63.53)        |
| Verbal threats                                                            | 2351 (62.44)        |
| Repeated and unwanted questions or remarks of a sexual nature             | 918 (24.38)         |
| Sexual touching                                                           | 481 (12.78)         |
| **Risk of burnout symptoms**                                              |                     |
| Emotional exhaustion                                                     |                     |
| High                                                                      | 1607 (42.68)        |
| Moderate                                                                  | 1111 (29.51)        |
| Low                                                                       | 1047 (27.81)        |
| Cynicism                                                                  |                     |
| High                                                                      | 1906 (50.62)        |
| Moderate                                                                  | 1240 (32.93)        |
| Low                                                                       | 619 (16.44)         |
| Professional efficacy                                                    |                     |
| High                                                                      | 95 (2.52)           |
| Moderate                                                                  | 302 (8.02)          |
| Low                                                                       | 3368 (89.46)        |
| **Feeling work short-staffed in the last month**                          |                     |
| Daily                                                                     | 604 (16.04)         |
| Weekly                                                                    | 1286 (34.16)        |
| Monthly                                                                   | 576 (15.3)          |
| Less often                                                                | 842 (22.36)         |
| Never                                                                     | 453 (12.03)         |
| **Care tasks rushed on most recent shift**                                |                     |
| Talking with residents                                                    | 1912 (50.78)        |
| Toileting                                                                 | 1716 (45.58)        |
| Mouth care                                                                | 1597 (42.42)        |
| Feeding residents                                                         | 1566 (41.59)        |
| Bathing residents                                                        | 1395 (37.05)        |
| **Care tasks undone due to lack of time on most recent shift**            |                     |
| Taking residents for a walk                                              | 1538 (40.85)        |
| Talking with residents                                                    | 1293 (34.34)        |
| Mouth care                                                                | 586 (15.56)         |
| Toileting                                                                 | 370 (9.83)          |
| Bathing                                                                   | 348 (9.24)          |
| Feeding                                                                   | 241 (6.40)          |
| **Engagement in decision-making meetings**                                |                     |
| Team meetings about residents                                             | 960 (25.51)         |
| Family conferences                                                        | 179 (4.76)          |
| Change of shift report                                                    | 3121 (82.94)        |
| **Job satisfaction, mean (SD)**                                           | 4.25 (0.64)         |
| **Psychological empowerment, mean (SD)**                                  |                     |
| Competence                                                                | 4.51 (0.47)         |
| Meaning                                                                   | 4.56 (0.49)         |
| Self-determination                                                        | 4.06 (0.72)         |
| Impact                                                                    | 3.75 (0.69)         |

* A high risk for burnout is indicated by 1 or more of the following: emotional exhaustion score of 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), with higher scores indicating higher levels of all 3.

** 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.

‴ Psychological empowerment reflects an active orientation in which an individual wishes and feels able to shape their work role and context. The score range is 1 (strongly disagree) to 5 (strongly agree) with a higher score indicating a higher level of psychological empowerment.
For categorical variables, we calculated the frequencies and percentages. For normally
distributed continuous variables, we calculated means and SDs; otherwise, medians and interquartile
ranges were calculated. Data analysis was performed from April to May 2020.

Results

Of 5381 eligible care aides in 91 nursing homes, 3765 (69.97%) participated in the study. Care aides
were predominantly women (3359 aides [89.22%]), aged 40 years or older (2632 aides [69.91%]),
and spoke English as an additional language (2571 aides [68.29%]). Approximately 25% (915 aides
[24.30%]) reported working in more than 1 nursing home (Table 1).

More than 70% of care aides reported moderate to high risk for emotional exhaustion (2718
aides [72.19%]) and cynicism (3146 aides [83.56%]), which are 2 core indicators of burnout (Table 2).
Approximately one-half of aides (1890 aides [50.20%]) reported that they had to work short-
staffed daily or weekly in the past month. They reported frequently rushing and missing essential
care tasks in their most recent shift and often experienced responsive behaviors from residents
associated with dementia. Less than 30% (960 aides [25.51%]) reported being frequently engaged
in team meetings about residents, and less than 5% (179 aides [4.76%]) were frequently engaged in
family conferences. Nevertheless, care aides reported feeling satisfied with their jobs. The majority
had high levels of professional efficacy and psychological empowerment.

Discussion

Most care aides are middle-aged to older women who speak English as an additional language.
Although they are highly satisfied with their jobs, they work in a resource-constrained environment
(e.g., often had to rush or miss care tasks). These findings, compared with our previous report, suggest that these prepandemic conditions were stable over a relatively long period (2009-2020).
However, despite stability, our findings indicate a workforce under strain—an at-risk group caring for
an even more at-risk resident group—a perfect storm for crisis, as the world has observed.

Care aides are uniquely positioned to make significant contributions to improving resident care
quality and quality of life. Our ongoing work demonstrates that care aide-led improvement programs
achieve sustained positive impact on residents’ clinical outcomes, including pain, mobility, and
responsive behaviors. As one care aide said, “The nurses listen to all the ideas instead of going
straight to medication when a simple touch or letting them sleep would have solved the problem.
There is more interaction. Some little things can help instead of having to resort to medications.”

Generalizations of these findings to care aides with characteristics different from those in urban areas
of Western Canada should be made with caution. Survey responses are subject to the usual cautions
when interpreting findings (e.g., self-report biases).
Author Contributions: Dr Estabrooks had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Concept and design: Song, Iaconi, Cummings, Hoben, Estabrooks.

Acquisition, analysis, or interpretation of data: Song, Iaconi, Chamberlain, Hoben, Norton, Estabrooks.

Drafting of the manuscript: Song, Iaconi, Chamberlain.

Critical revision of the manuscript for important intellectual content: All authors.

Statistical analysis: Song, Iaconi, Hoben, Estabrooks.

Administrative, technical, or material support: Cummings, Hoben, Norton.

Supervision: Norton, Estabrooks.

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