OUTLOOK ON NURSING

A snapshot from Canadian nurses on work environments pre-COVID-19

Linda McGillis Hall, PhD, RN Sanja Visekruna, PhD, RN

August 2020



Canadian Federation of Nurses Unions

Photo by Matthew Henry

WE ARE CANADA'S NURSES.

We represent close to 200,000 frontline care providers and nursing students working in hospitals, long-term care facilities, community health care and our homes. We speak to all levels of government, other health care stakeholders and the public about evidence-based policy options to improve patient care, working conditions and our public health care system.



















From coast to coast to coast, we acknowledge the ancestral and unceded territory of all the Inuit, Métis and First Nations People that call this land home. The Canadian Federation of Nurses Unions is located on the traditional unceded territory of the Algonquin Anishnaabeg People. As settlers and visitors, we feel it's important to acknowledge the importance of these lands, which we each call home. We do this to reaffirm our commitment and responsibility in improving relationships between nations, to work towards healing the wounds of colonialism and to improving our own understanding of local Indigenous peoples and their cultures.

Published by

Canadian Federation of Nurses Unions 2841 Riverside Drive Ottawa, ON K1V 8X7 613-526-4661

www.nursesunions.ca

Project team

Carol Reichert Ben René Oxana Genina

Layout and graphics

Alyster Mahoney

ISBN

978-1-7753845-8-8

Printed & bound

Imprimerie Plantagenet Printing

Cover images

Griffin Wooldridge (front) Matthew Henry (back)

© 2020 Canadian Federation of Nurses Unions

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means without the permission of the publisher.

Contents

President's Message	I	
Acknowledgements	1	
Executive Summary	2	
Introduction	4	
Background	5	
Methods	9	
Measures	10	
Results	11	
Discussion	21	
Conclusion	27	
Limitations	28	
Recommendations	29	
References	31	
Appendix	37	

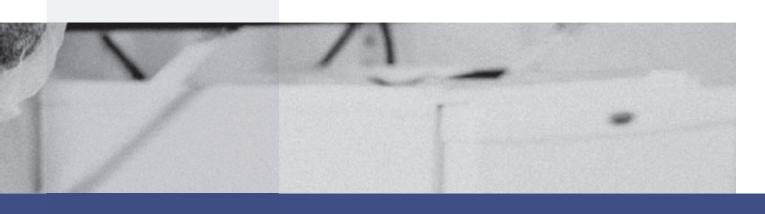


In the midst of a pandemic, the deep cracks in our health care system are being vividly revealed for all to see.



Linda Silas
President
Canadian Federation of

Nurses Unions



President's Message

For decades, the Canadian Federation of Nurses Unions (CFNU) and other health care stakeholders have raised the alarm.

Now, in the midst of a pandemic, the deep cracks in our health care system are vividly revealed for all to see. It has become glaringly apparent that staffing levels in health care facilities are dangerously low.

The CFNU says: enough is enough - we need governments to act now! Our message is a simple one: fix it!

It's time for a national strategy to safely staff our health care facilities. Nurses are the backbone of Canada's health care system – without frontline nurses, our health care system will cease to function. The nursing workforce, faced with an unhealthy work environment, unsafe staffing and a workforce that is badly eroded, needs immediate attention.

For decades, the CFNU and nurses unions across the country have compiled the evidence of the financial costs of excessive overtime coupled with high rates of absenteeism (close to \$2 billion in 2016),

alongside high patient/resident-to-nurse ratios, nursing shortages, generational issues, and related retention and recruitment challenges.

Studies commissioned by professional associations, policy groups and independent academic research have confirmed CFNU's findings that nurses experience heavy workloads, lack of sufficient staffing, workplace violence and mental disorder symptoms arising from an unhealthy work environment.

In 2001, the Canadian Nursing Advisory Committee (CNAC) was tasked with improving the quality of worklife for nurses. In 2002. CNAC released its final report recommending, in part, that the federal government fund an annual survey of nurses' health. As a result, the National Survey of the Work and Health of Nurses (NSWHN). a collaborative effort between the Canadian Institute for Health Information (CIHI), Health Canada and Statistics Canada. was conducted from October 2005 to January 2006.

Following the alarming results of this national survey of 19,000 nurses, the CFNU worked with Health Canada's national nursing office from 2009 to 2011 on a series of pilot projects called Research to Action (RTA). Projects were rolled out in provinces across the country to improve the quality of nurses' work environments. After the success of RTA, the CFNU urged provinces to scale up these projects in order to develop long-term nursing strategies to address nurses' work and health.

However, this failed to happen. Instead, the national nursing office was disbanded.

Collectively, provincial governments steadily eroded the nursing workforce as they faced budget constraints.

What was the result of a decade of inaction?

A report released this spring by the CFNU, Mental Disorder Symptoms Among Nurses in Canada, based on a groundbreaking survey of nurses in Canada during mid-2019, found alarming rates of mental disorder symptoms among thousands of nurses: one third screened positive for major depressive disorder and suicidal ideation; more than a quarter screened positive for generalized anxiety disorder and clinical levels of burnout. PTSD symptom rates were consistent with those for public safety personnel, such as police.

The Outlook on Nursing: A snapshot from Canadian nurses on work environments pre-COVID-19 builds on CFNU's research on nurses' mental disorders. Outlook on Nursing is based on a pre-COVID survey undertaken from late October 2019 until March 17, 2020. The survey adds another pillar to the foundational evidence for urgent action to address the challenges nurses continue to experience on a daily basis.

The survey respondents were mostly experienced nurses (16.7 years on average), working full-time (66.7%), and mainly women (91.3%) as women continue to make up the vast majority of the nursing workforce.

Despite the inherent challenges, nurses are working hard to ensure that the quality of patient care remains high – potentially at a cost to themselves. While almost 70% (68.8%) reported the quality of patient care as excellent or good, two thirds (66.2%) said the quality of the nurses' work environment was either fair or poor.

Echoing the results of CFNU's 2020 report on mental disorders in nurses, workplace violence

emerged as a major issue for nurses. About one quarter of nurses surveyed said they experienced physical violence from patients or their families 'once a month or less', or 'a few times a month'. About another quarter (26.3%) of the nurses said they experienced physical violence 'once a week' (6.8%), 'a few times a week' (11.6%) or 'every day' (7.9%).

Verbal abuse by patients or their families was even more common than physical abuse. About one in five study participants (21.2%) experienced verbal abuse 'daily'. Another 30% experienced verbal abuse 'a few times a week' (20.6%) or 'once a week' (9%). About another 30% (28.1%) indicated that verbal abuse occurred a few times during the course of the month or 'once a month or less'.

The prevalence of physical and verbal abuse of nurses contributes to high levels of emotional exhaustion among nurses (65.3%), as well as to high rates of work-related physical injuries: almost 40% of nurses surveyed (37.8%) experienced work-related physical injuries on a monthly basis (a few times a month or once a month or less). Some participants' workplaces put them particularly at risk for high rates of work-related physical injuries: 17% experienced injuries 'once a week', 'a few times a week' or 'every day'.

Prior to the COVID-19 pandemic, the nursing workforce was aging, with many nurses on the cusp of retirement. Many new nurses were choosing to work part time, sometimes because of excessive overtime and unsustainable workloads. As a result, shortages have been experienced in the nursing workforce.

Aggressive recruitment campaigns to address shortages were launched in some jurisdictions. Shortages meant that sometimes, particularly in rural areas, emergency departments were closed or surgeries were cancelled. Looking ahead to a post-COVID world, nothing indicates that things will improve. In fact, without proper health human resources planning, they are likely to worsen.

The Outlook on Nursing Study confirms long-standing issues with the adequacy of staffing resources, as well as dissatisfaction with the supports and abilities of managers and leaders.

Dissatisfaction with nursing work environments means many nurses may soon choose to leave their current jobs or leave nursing altogether.

Nurses surveyed were asked about their intention to leave their current job: over half (59.7%) planned to leave their current job within the next year as a result of job dissatisfaction.



Among these nurses, over a quarter (27.1%) planned to leave nursing altogether, suggesting the potential for major attrition from the profession.

COVID-19 has brought the long-standing crisis in the nursing workforce to the fore. It has exacerbated already existing issues such as burnout and occupational stress injuries related to potentially traumatic experiences such as violence and abuse, excessive overtime, unsustainable workloads, unsupportive management and workforce shortages.

For the women who make up most of the nursing workforce, COVID-19 has also made it harder to find daycare, harder to educate their school age children, harder to manage their work schedules, all of which may contribute to further erosion of the nursing workforce as women find their worklife untenable.

Furthermore, nurses - the much-lauded "heroes" during the COVID-19 pandemic - are being abused on the job by disgruntled patients and their families, while also sometimes

facing discrimination in their own communities because of their role as health care workers.

Even as they grapple with enormous stress, they are also being offered limited access to vacations and leaves, with the potential for forced redeployment.

Lack of access to appropriate PPE needed to keep them safe has meant further anxiety for themselves and their families, and is wreaking havoc on nurses' mental health. Nurses have had to fight tooth and nail to receive the protections they deserve. Nurses have resorted to negotiations, grievances, complaints, work refusals and protests.

When all else failed, nurses have ended up in court. All in an attempt to force employers – and governments – to provide the appropriate PPE they are required to provide under provincial occupational health and safety laws.

Currently, health care workers make up about 20% of total COVID-19 cases in Canada. The fact that so many health care workers in Canada have become infected is a damning indictment of Canada's failure to protect those who are caring for the sick in the midst of a pandemic.

This is unacceptable. It hear-kens back to a time in the 1800s during the Crimean War, when nurses fought under the inspiring leadership of Florence Nightingale to be respected and listened to on matters such as basic hygiene and appropriate PPE.

Faced with this daily reality, where their health and well-being are being placed at risk, many nurses may choose to leave their jobs during or soon after the pandemic.

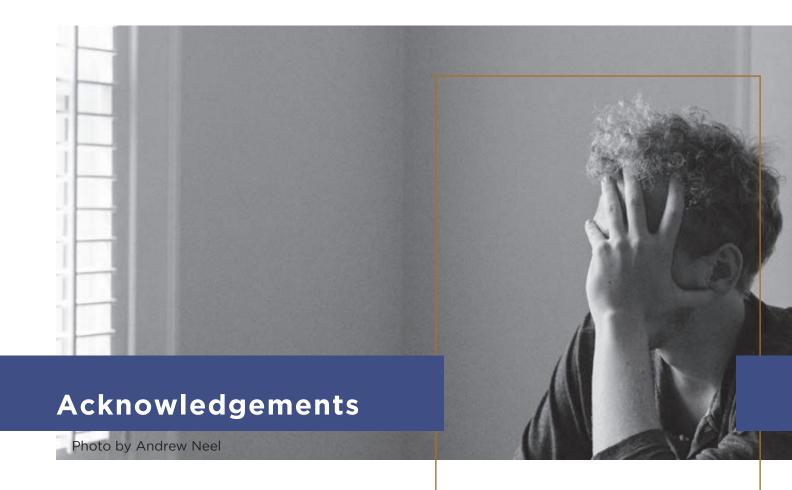
Many already have.

The future of the nursing workforce is bleak unless action is taken now. Without immediate action, a post-COVID-19 world may mean closed hospital beds, cancelled surgeries, shuttered emergency rooms and fewer long-term care beds because nurses are not there to staff them.



Therefore, the Canadian Federation of Nurses Unions recommends that federal and provincial governments renew their commitment to the nursing workforce and immediately enact and provide dedicated funding for the following recommendations.

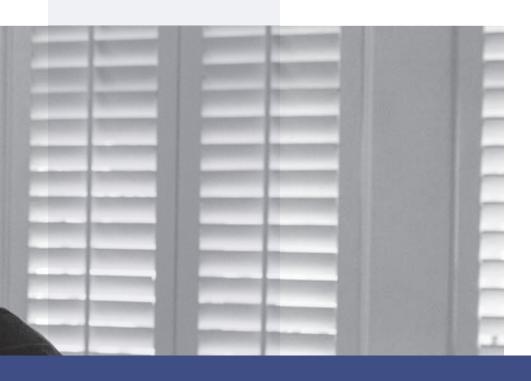
- We recommend that the Federal government establish a permanent National nursing bureau/office and appoint a nurse leader in the federal government to:
 - **a** Build and advise the federal government on nursing and health care policy in Canada;
 - **b** Liaise with provincial and territorial principal/chief nurses to present a unified nursing voice on political and policy agendas to inform public and population health policies and programs; and
 - Lead a national advisory committee committed to planning and securing Canada's nursing health and human resource needs across sectors to support the health and health care needs of all people living in Canada.
- We recommend that the federal government commit to conducting annual standardized assessments of the quality and safety of health care work environments for Canada's nurses to:
 - a Inform the development of a national action plan and sustainable strategy to support the physical, mental and social health of Canada's nursing workforce, as well as mitigate the impact of the more recent COVID-19 pandemic on the nursing workforce;
 - b Identify systems and processes requiring investment to support the mental, physical health and wellbeing of Canada's nursing workforce; and
 - C Implement plans for investment in supports for the ongoing educational development of Canada's nursing workforce through a dedicated funding envelope to ensure nurses are appropriately prepared for the changing health care needs of all people living in Canada.



The authors would like to thank Canada's regulated nurses who generously gave their time to assist in this project by completing the surveys that provided the data reported herein. We would also like to acknowledge the genuine interest and support for this study, provided by the CFNU, its provincial member organizations and other organizations (FIQ, BCNU) which promoted this study to their members. In addition, we thank the members of the CFNU Advisory Committee for this project, including Cathryn Hoy, Marie-Ève Viau, Maura MacPhee, Judith Grossman, Paul Curry and Carol Reichert, for their ongoing guidance throughout the study process. Finally, we would also like to acknowledge the assistance of Dr. Sarah Brennenstuhl for her contribution to the data analysis.

The majority of findings in this study underscore the importance of the environment in which nurses work...

1



Executive Summary

The Outlook on Nursing Study was a national survey that aimed to assess Canadian nurses' perceptions of their work environments. The study was conducted across all health care sectors in the country, including hospitals, long-term care settings, home care and other health care workplaces. Approximately 7,153 regulated Canadian nurses, including registered nurses (RNs), licensed practical nurses (LPNs), registered psychiatric nurses (RPNs) and nurse practitioners (NPs), participated in the study. Data was obtained through a secure online survey platform.

Nurse participants were asked to provide their perceptions on a variety of aspects of their work, including patient care quality, safety, nursing work environments, professional practice environments, as well as nurse outcomes (work and career satisfaction, turnover intent and burnout). Participants came from across all provinces and territories in the country, although a quarter were from Alberta, followed by higher numbers from Quebec, British Columbia and Ontario. Most were registered nurses working in full-time positions in hospitals.

The majority of findings in this study underscore the importance of the environment in which nurses work, and the challenges faced by nurses in current work settings across Canada. While perceptions of patient safety and the quality of care being provided in Canada's health care settings were positive overall, system gaps such as nurse-to-nurse communication during care transfers and shift changes were highlighted as quality-related concerns. Ratings on the quality of the work environments were predominantly poor overall,

with evidence of communication concerns between management and staff nurses, staffing inadequacy and poor workplace climates.

Nurses reported a high prevalence of verbal abuse and complaints from patients and/or families, with half of study participants subjected to verbal abuse and a quarter receiving complaints on a daily to weekly basis. While less prevalent, physical abuse from patients and/or families was experienced from daily to once a month. In addition, half of the study participants had experienced injuries from daily to once a month. Both the prevalence and nature of these occurrences is a cause for concern for the profession.

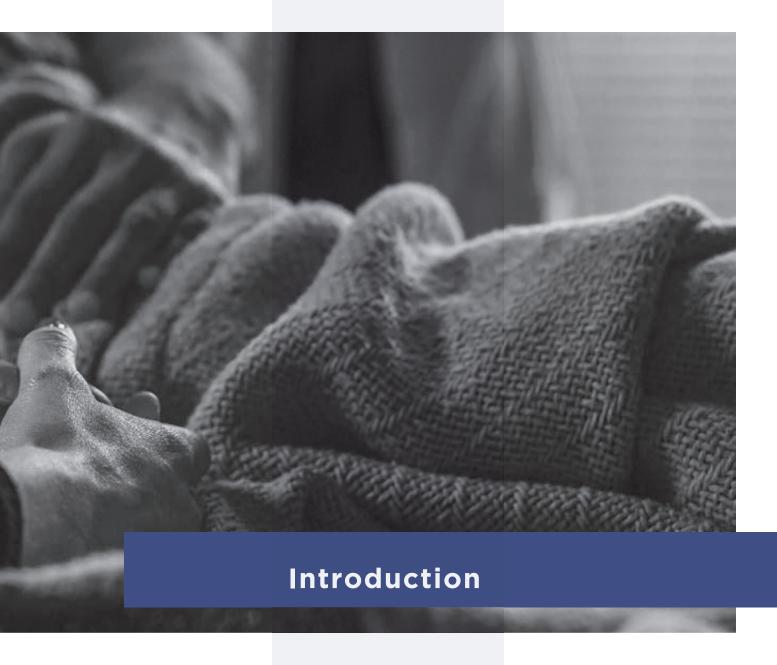
Dissatisfaction with current work was identified by just over half of the study participants, with close to two thirds



planning to leave their current job within the next year as a result of job dissatisfaction. Of those leaving their jobs, the majority plan to seek another nursing job, reflecting perhaps the high satisfaction with nursing as a career reported by most of the study participants. However, over a quarter of those planning to leave their jobs within the next year aim to seek work outside of nursing, representing a substantial loss to the profession at a time when experienced nurses are in great need.

Nurse participants in this study reported high levels of burnout overall, in particular with high levels of emotional exhaustion. Burnout has consistently been identified as a major concern for nurses in Canada for several years, a point substantiated further in a recent report on the mental health of nurses in Canada, where over a quarter of study participants reported clinical burnout symptoms that required attention.¹

In summary, the results of this study highlight that the focus of nursing issues taken on by nursing leadership and policy leaders in the future needs to go beyond attention to the supply of nurses available to provide care. Understanding the complex state of nursing work environments in which Canadian nurses work and the impact of these work environments on the health and work outcomes experienced by nurses is critical to ensuring a sustainable nursing workforce in the future.



For at least two decades Canadian nurse researchers and policy leaders have drawn attention to concerns experienced by nurses in health care work environments, and the impact of these on nurses, patients and Canada's overall health system. While sporadic efforts were undertaken to address these challenges, no systematic approach has been adopted and maintained over time. Studies commissioned by various nursing professional and policy groups, unions, as well as independent research, have generated consistent evidence

that nurses suffer from heavy workloads, perceptions of lack of support from management, insufficient staffing, job dissatisfaction, workplace violence, burnout and mental health issues. Yet Canadian nurses continue to experience these same workplace issues as demonstrated in this current study report.



The essential role of nurses to Canada's health care system has been acknowledged by health policy leaders for several decades.² Fueled by concerns of a nursing shortage related to health system reforms in the 1990s, the Conference of Deputy Ministers/Ministers of Health in 1999 directed the Advisory Committee on Health Human Resources (ACHHR) to create a pan-Canadian strategy for nursing to prepare options for consideration related to developing the nursing workforce.3 Further support for nursing was evidenced in 1999 when the federal health minister established an Office of Nursing Policy in Health Canada to ensure that the views of nurses and the nursing profession were integrated into health policy.4

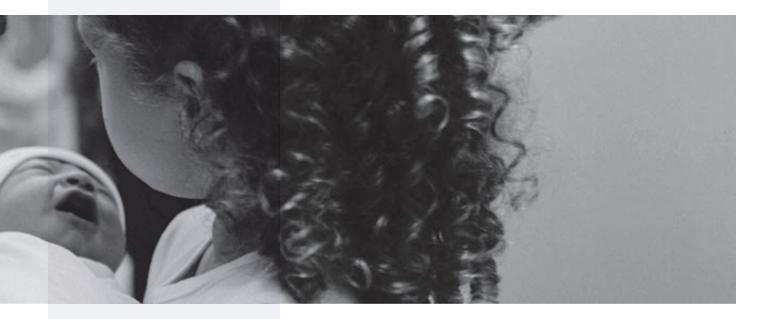
One of the first reports to emerge from these initiatives was the 2000 report of the nursing strategy group, which identified plans aimed primarily at addressing nursing supply issues.⁵ Two of the eleven strategies recommended, related to nursing work environments, included the immediate development of a Canadian Nursing Advisory Committee (CNAC)

to focus on improving the quality of worklife for nurses. In addition, provincial-territorial nursing officers were advised to "identify and support the implementation of retention strategies for their respective workforces, which focus on improving the quality of the work lives of nurses."⁵

Developed in 2001, CNAC released a final report a year later, which recommended increasing the number of nurses in Canada, improving the education and maximizing the scope of practice of nurses, and improving working conditions for nurses.6 One of the report recommendations was that the federal government should fund an annual survey of nurses' health. As a result, the National Survey of the Work and Health of Nurses (NSWHN), a collaborative effort between the Canadian Institute for Health Information (CIHI), Health Canada, and Statistics Canada, was conducted from October 2005 to January 2006. The first of its kind in Canada, this groundbreaking survey had close to 19,000 nurse respondents (80% response rate) and highlighted information

about nurses' work, working conditions, staffing concerns, as well as physical and mental well-being.⁶ Key findings identified the high physical demands of nursing work, exposure to verbal abuse and workplace assault, and subsequent physical and mental health issues experienced by nurses.⁷

Also beginning in 2001, the Nursing Sector Study group was developed and produced 15 technical research reports over a five-year period, aimed at creating "a long-term strategy to ensure that there was an adequate supply of skilled and knowledgeable nurses to meet the evolving health care needs of all Canadians".8 One of these reports presented findings from the Canadian Survey of Nurses from Three Occupational Groups - registered nurses (RNs), registered psychiatric nurses (RPNs) and licensed practical nurses (LPNs) on nurse perspectives of factors in their work environments that influenced the nature and effectiveness of nursing care.9 Responses were obtained from 13,620 Canadian nurses (36% response rate), highlighting the aging nursing workforce at the

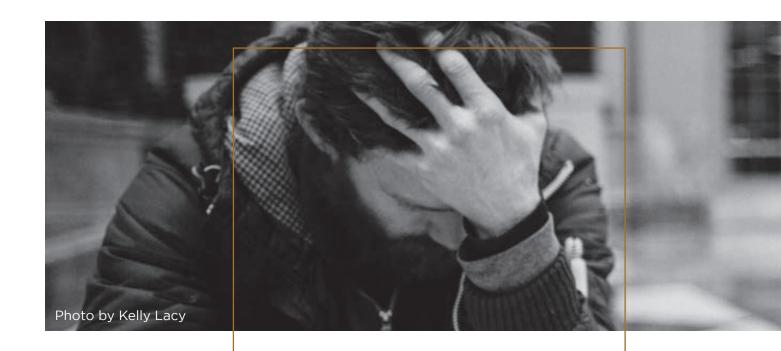


time, the importance of strong nursing leadership in reducing turnover, and key linkages between professional practice environments, empowerment and job satisfaction.9 Job dissatisfaction was associated with workplace violence experiences, the most common being verbal aggression from patients.9 A 2002 report of key informant interviews with health care stakeholders, aimed at identifying major work-related health problems faced by Canadian nurses, further validated these concerns, concluding that "it is clearly time for a strong, focused and dedicated effort to establish a method for monitoring the health and work environment".10

Despite these influential and formative initiatives, ongoing large-scale projects focusing on nurses' health and work environments in Canada were not sustained. Substantial work was undertaken to develop a nursing database through the pioneering work of CIHI, which began collecting and reporting data on the supply, distribution and practice characteristics of Canada's regulated nursing health professionals in 2002."

Similar initiatives in the area of nursing work environments and nurses' health have not occurred. A national focus on work environments emerged with the development of the Quality Worklife - Quality Healthcare Collaborative (QWQHC) in 2005, which recommended that all health care settings adopt and monitor a set of quality worklife indicators tied to performance agreements and accountability reporting.11 Currently, one of the nine national standards of excellence identified in Accreditation Canada's QMentum accreditation program relates to a safe and healthy worklife where individual employers monitor indicators of the work environment and are expected to address any issues that arise.13

Throughout the early part of that decade, numerous studies and reports on nursing were commissioned as federal organizations continued to examine key issues confronted by the nursing workforce in practice and policy contexts. Until 2009, the Canadian Nurses Association (CNA) led a series of reports on the nursing shortage in Canada that



Ongoing large-scale projects focusing on nurses' health and work environments in Canada have not been sustained.



highlighted supply requirements for the future. More recently, CNA as the professional voice for nurses in Canada has focused on articulating and enhancing the role of nurses in the Canadian health care system.¹⁴ The Canadian Federation of Nurses Unions (CFNU) led a number of initiatives over the past two decades directed at issues facing nurses over time, including overtime and absenteeism, workload, safe staffing, generational issues, workplace safety and, most recently, mental health disorders.

Individual academic researchers have also conducted a great deal of research on nursing work environments, much of which explored the relationships between nurse staffing, work environments and outcomes in acute care hospital settings. 15-24 While substantive in nature, most of these studies focused on a single province. An exception was the 1999 international study comparing hospital nurse staffing, organization and quality of care across five countries, including Canada, where just under half of nurse participants (n=17,450) from British

Columbia. Alberta and Ontario reported job dissatisfaction and burnout levels above the norm for health care personnel.^{25,26} Further analysis of data from this study demonstrated that factors in professional nursing work environments, such as staffing adequacy and use of a nursing model of care, had a direct impact on burnout,27 and reinforced that nursing leadership played a fundamental role in the quality of worklife and burnout experienced by nurses.²⁸ In addition, an in-depth examination of the data from Alberta demonstrated that hospitals that had nurses with higher nurse education levels, a richer nursing skill mix, better nurse-physician relationships and lower use of casual and temporary staff were associated with lower patient mortality.²⁹ This international study has since formed the basis for the largest body of research undertaken in the world examining linkages between organizational features of hospital care, nurse recruitment, nurse retention and patient outcomes.30

Known as the RN4Cast study, a consortium of researchers from 12 European countries (Belgium,

England, Finland, Germany, Greece, Ireland, the Netherlands, Norway, Poland, Spain, Sweden and Switzerland), the US and three additional countries (Botswana, China and South Africa) went on to survey nurses and patients in about 500 general acute care hospitals in 2009-2010.³⁰ Numerous publications resulting from this work report the effects nurse staffing and working environments have on nurse and patient outcomes, and other countries have since replicated the study including Portugal (2014), Italy (2015-2016) and Cyprus (2015-2016).31,32 In Canada, work is currently underway in Ontario to replicate the RN4Cast study. Initial results of the nurse survey in Ontario identified ongoing concerns with the work environment, burnout and job dissatisfaction. As no national studies have been completed in recent years on this area, the CFNU commissioned a researcher from the University of Toronto who led the Ontario project to administer the RN4Cast nurse survey across all health care sectors in Canada to obtain a snapshot from nurses of their perceptions of current work environments.



Study data were collected through an online survey from October 22, 2019, until March 17, 2020, hosted on the well-established Qualtrics secure survey platform. Data collection was suspended on March 17, 2020, following consultation with the CFNU after the WHO declared that the coronavirus COVID-19 outbreak was a global pandemic. Participants had the option of completing the survey in English or French. A set of extensively validated measures used in the international RN4Cast studies made up the online nurse survey.³⁰⁻³² As the online survey had been used primarily in hospital settings in previous research, the survey was adapted by the research team with input from an Advisory Committee led by the CFNU to include wording that was relevant for all health care work sectors in Canada. The survey took approximately 20 minutes to complete and contained 112 questions that focus on the nursing work environment, job satisfaction, nurse-perceived quality of care, burnout, career satisfaction, turnover intent as well as a demographics section. Results of this

survey of nurses are presented in this report using valid percentages.

Approval to conduct the study was obtained from the University of Toronto's Health Sciences Research Ethics Board. A multimodal recruitment strategy was used by the CFNU to recruit participants via email and various social media routes (e.g., Facebook, Twitter, virtual events with the CFNU president through their eight member unions as well as the non-CFNU member nurses' unions in Quebec and British Columbia, and other relevant nursing professional associations. Potential participants were provided with the URL for the online survey. All currently practising regulated nursing care providers, including registered nurses (RNs), licensed practical nurses (LPNs), nurse practitioners (NPs) and registered psychiatric nurses* (RPNs) across the 13 provinces and territories in Canada and across health sectors (e.g., hospital, long-term care, community/ home care and other), characterized the study sample.

*NOTE: in Western provinces only



Measures

Demographics

The online survey included a demographic section to capture characteristics of individual nurse participants (e.g., gender, age, education, language spoken and category of regulated nursing professional) as well as characteristics of their work (e.g., work experience, work status, work setting and province of employment).

Patient Care Quality, Safety, Work Environments and Outcomes

Participants completed the online survey comprised of well-validated measures that capture nurse perceptions of patient care quality, safety, nursing work environments, professional practice environments, as well as nurse outcomes (work satisfaction, career satisfaction, turnover intent and burnout). Early versions of some of the measures from this survey were also used in the 1999 international nurse study^{25,26,27,33,34} as well as some components of the 2005 NSWHN,7 both of which had large samples of Canadian nurse participants. See Appendix for detailed information on the validated study measures.



Individual Nurse Demographics

Study participants were primarily female (91.3%), with an average age of 41.97 years. Close to half of participants were under the age of 40, with 18.9% under the age of 30 years and 27.8% between the ages of 30 and 39 years (see Table 1). Of the remainder, 21.2% were between the ages of 40 and 49 years, and 24.3% from 50 to 59 years of age. Fewer were over the age of 60 (7.8%). Close to half (47.6%) held a nursing baccalaureate degree, while 40% were diploma-prepared. and the remainder held other degrees. Most were educated in Canada (96.6%) and Englishspeaking (84.5%), while 15.5% spoke French. The majority of study participants were registered nurses (83.8%), followed by licensed practical nurses (12.8%), while far fewer were registered psychiatric nurses (1.9%) or nurse practitioners (1.5%), for an overall response number of 7,153 regulated Canadian nurses.

Table 1. Individual Nurse Demographics

Gender	Study Participants	
Female	91.3%	
Male	5.5%	
Prefer not to say/prefer to self-describe	3.1%	
Age		
Under 30 years of age	18.9%	
30 to 39	27.8%	
40 to 49	21.2%	
50 to 59	24.3%	
60 to 69	7.3%	
70 years and above	0.5%	
Education		
Diploma	40.0%	
Nursing baccalaureate	47.6%	
Non-nursing baccalaureate	6.3%	
Masters	3.8%	
Regulated nursing professional provider catego		
Registered nurse	83.8%	
Licensed practical nurse	12.8%	
Registered psychiatric nurse	1.9%	
Nurse practitioner	1.5%	



Work Characteristics

Over 80% of study participants provided information on the length of their experience in nursing. Of those who provided this information, over 40% had less than ten years of work experience, and the average length of work experience for all study participants was 16.7 years. Over two thirds (66.7%) of study participants were employed full-time, while 26.3% reported they were working part-time, and the remaining 7% in casual positions. Over two thirds of participants worked in the hospital sector (69.6%). Fewer respondents were employed in community/ home care (15.1%), long-term care (11.4%), or other sectors (3.9%). The 'other' category includes nurses employed in business, industry, occupational health, private nursing agencies, self-employed, physicians' offices, family practice units, educational institutions, associations, government and correctional agencies.11 One quarter of the survey participants came from Alberta (25.2%), followed by Quebec (16.7%), British Columbia (11.9%), Ontario (11.6%), and Nova Scotia (10.1%). The remainder of participants came from the other provinces/territories as outlined in Table 2.

Table 2: Work Characteristics

Work experience	Study participants
1 to 10 years	41.2%
11 to 20 years	24.6%
21 years or more	34.2%
Work status	
Full-time	66.7%
Part-time	26.3%
Casual	7.0%
Location of employment	
Hospital	69.6%
Home care/community	15.1%
Long-term care	11.4%
Other	3.9%
Province of employment	
Alberta	25.2%
Quebec	16.7%
British Columbia	11.9%
Ontario	11.6%
Nova Scotia	10.1%
Manitoba	6.6%
Newfoundland and Labrador	6.2%
Saskatchewan	5.8%
New Brunswick	4.6%
Prince Edward Island	1.0%
Northwest Territories	0.1%
Nunavut	0.1%
Yukon	0.0%



Quality of Care and Patient Safety

When asked to describe the quality of nursing care delivered to patients in the area that they worked, over two thirds of study participants responded positively, with 22.6% reporting the care to be 'excellent', while another 46.2% rated it as 'good'. Of the remainder, a quarter (24.7%) rated the quality of nursing care as 'fair', with 6.5% providing a 'poor' rating (see Table 3). Nurse participants were also asked to give their place of work an overall grade for patient safety. The largest proportion of nurses (38.9%) indicated the midpoint rating of 'acceptable'. An additional 30.2% ranked patient safety as 'very good', and 8.3% gave an 'excellent' rating. Less than a quarter of study participants rated patient safety in their workplace as 'poor' (16.4%) or 'failing' (6.2%).

Table 3: Quality of Care and Patient Safety

Quality of patient care	
Excellent	22.6%
Good	46.2%
Fair	24.7%
Poor	6.5%
Patient safety	
Excellent	8.3%
Very good	30.2%
Acceptable	38.9%
Poor	16.4%
Failing	6.2%

Perceptions of specific dimensions of patient care quality and safety were explored further in this study. Half of the nurse participants in this study reported that things 'fall between the cracks' when transferring patients between units (50.7%), while another 39.4% noted that important patient care information gets lost between shift changes. Prevention of future errors was a focus of discussion for 62.3% of study participants, although only 36.9% indicated that they were made aware of changes being implemented as a result of patient safety event reports. At least half (50.2%) of the nurses participating in this study do not feel free to question decisions or actions made by those in positions of authority, while 45.1% feel their mistakes are held against them. Finally, similar numbers of participants felt that management actions in their workplace reflect that patient safety is a priority (38.8%), and 39.0% disagreed. For most of these specific patient safety dimensions, close to a quarter of nurses participating in this study had neutral perceptions, indicating that they neither agreed nor disagreed that the event occurred (see Table 4).

Table 4: Patient Safety

Staff feel mistakes are held against them	
Agree or strongly agree	45.1%
Neither agree nor disagree	29.5%
Disagree or strongly disagree	25.3%
Important patient care information is lost d	uring shift changes
Agree or strongly agree	39.4%
Neither agree nor disagree	22.7%
Disagree or strongly disagree	37.9%
Things 'fall between the cracks' when trans	ferring between units
Agree or strongly agree	50.4%
Neither agree nor disagree	23.0%
Disagree or strongly disagree	26.6%
Staff feel free to question decisions/actions	s of those in authority
Agree or strongly agree	32.5%
Neither agree nor disagree	17.3%
Disagree or strongly disagree	50.2%
We discuss ways to prevent errors from hap	ppening again
Agree or strongly agree	62.3%
Neither agree nor disagree	15.6%
Disagree or strongly disagree	22.1%
Feedback on changes implemented based of	on event reports is given
Agree or strongly agree	36.9%
Neither agree nor disagree	21.4%
Disagree or strongly disagree	41.7%
Actions of management show patient safet	y is a priority
Agree or strongly agree	38.8%
Neither agree nor disagree	22.2%
Disagree or strongly disagree	39.0%



Quality of Work Environments

In contrast to quality of care and patient safety, which the majority rated favourably, the work environment was rated 'poor' by over a quarter of study participants (27.3%), another 38.9% rated it as 'fair', while 27.7% gave it a 'good' rating, and only 6.1% rated it as 'excellent' (see Table 5).

Table 5: Quality of Work Environment

Work environment	
Excellent	6.1%
Good	27.7%
Fair	38.9%
Poor	27.3%

Interactions with Patients and Families

Study participants were asked to comment on the frequency of occurrence of different types of incidents that are related to interactions with patients and families, with response options ranging from 'never' to 'every day'. These include complaints from patients or their families, as well as verbal or physical abuse towards nurses by patients and/or families. Over a quarter of study participants received complaints from patients and families 'every day' (8.7%), 'a few times a week' (10.5%) or 'once a week' (7.6%). Another 18.1% received complaints from patients and/ or their families 'a few times a month', while 17.5% noted these complaints occurred 'once a month or less'. Over a third of study participants experienced limited complaints from patients and families - 'a few times a year or less' (31.4%) or 'never' (6.2%) (see Table 6).

Verbal abuse towards nurses from patients and/or families was much more prevalent than complaints. Just under a quarter of study participants (21.2%)



Every day

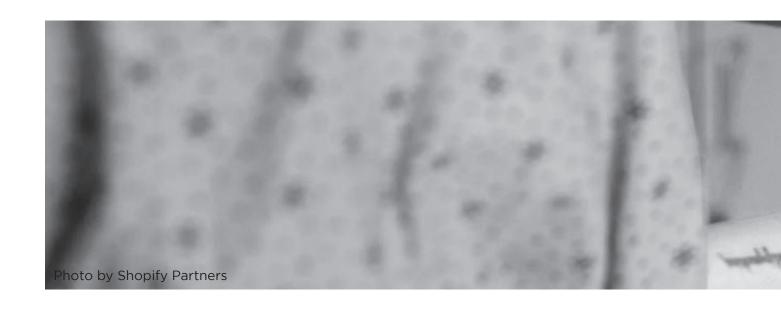
experienced verbal abuse daily, while a similar number (20.6%) noted it occurred 'a few times a week', and 9% reported weekly occurrences. Another 16.4% reported verbal abuse from patients and/or families 'a few times a month', and 11.7% reported it 'once a month or less'. Fewer experienced verbal abuse from patients and/ or families 'a few times a year or less' (17.3%) or 'never' (3.6%).

Experiences of physical abuse from patients and/or families were less common than experience with verbal abuse, with 19.3% of nurse participants 'never' experiencing it, and 29.2% reporting having experienced it 'a few times a year or less'. Another 12.2% of participants reported physical abuse from patients and/or families occurred 'once a month or less', and 13.0% indicated it happened 'a few times a month'. The remaining study participants reported experiencing physical abuse from patients and families daily (7.9%), 'a few times a week' (11.6%) or 'once a week' (6.8%).

Table 6: Interactions with Patients and Families

Complaints from patients/families	
Never	6.2%
A few times a year or less	31.4%
Once a month or less	17.5%
A few times a month	18.1%
Once a week	7.6%
A few times a week	10.5%
Every day	8.7%
Verbal abuse from patients/families	
Never	3.6%
A few times a year or less	17.3%
Once a month or less	11.7%
A few times a month	16.4%
Once a week	9.0%
A few times a week	20.6%
Every day	21.2%
Physical abuse from patients/families	
Never	19.3%
A few times a year or less	29.2%
Once a month or less	12.2%
A few times a month	13.0%
Once a week	6.8%
A few times a week	11.6%

7.9%



Work-Related Injuries

Work-related physical injuries were also reported, with only 9.4% of nurse participants in this study 'never' experiencing one (see Table 7). Of the remainder, over a third of participants (35.7%) had a work-related physical injury 'a few times a year or less', while 19.8% reported these injuries occurred 'once a month or less', and another 18.0% noted injuries happened 'a few times a month'. The remainder of participants reported work-related physical injuries occurred 'once a week' (5.6%), 'a few times a week' (7.2%) and 'every day' (4.3%).

Table 7: Work-Related Physical Injuries

Work-related physical injuries	
Never	9.4%
A few times a year or less	35.7%
Once a month or less	19.8%
A few times a month	18.0%
Once a week	5.6%
A few times a week	7.2%
Every day	4.3%



Professional Practice Environments

Nurse participants were asked to describe their perception of the professional practice environment across different health care settings in relation to a set of factors that have been linked to nurse job satisfaction, patient safety and quality of care in previous research.35,36 Mean scores reported, that are above the scale midpoint of 2.5, indicate a favourable nursing work environment, while scores below represent an unfavourable environment.³⁵ The subscales of collegial nurse-physician

relations (2.93) and nursing foundations for quality of care (2.64) were rated as favourable, whereas the subscales of staffing and resource adequacy (2.08), nurse participation in hospital affairs (2.15) and nurse manager ability, leadership and support for nurses (2.37) were rated as unfavourable by study participants.

Work Satisfaction and Turnover Intent

Perceptions of work satisfaction were relatively evenly split with just over half of nurses participating in the study reporting being 'very or a little dissatisfied' (52.4%) with their current job. The remainder of respondents reported feeling 'moderately or very satisfied' (47.6%) (see Table 8). Turnover intention was also examined, as participants were asked if they would leave their workplace because of job dissatisfaction. Over half of the study participants (59.7%) indicated that they planned to leave their current job within the next year as a result of job dissatisfaction. Most planned to seek another nursing job either in a hospital (45.6%) or elsewhere in nursing (27.3%), while 27.1% plan to seek other employment.

Table 8: Work Satisfaction and Turnover Intent

Work satisfaction	
Moderately or very satisfied	47.6%
A little to very dissatisfied	52.4%
Turnover intent	
Yes	59.7%
No	40.3%
Plans for next work role	
Hospital nursing role	45.6%
Nursing role outside of a hospital	27.3%
Non-nursing role	27.1%

Satisfaction with work was explored in greater depth with participants asked to identify their level of satisfaction with particular aspects of their work. Nurse participants in this study were most satisfied with their level of independence at work (78.8%) and professional status (77.4%), while sick leave (60.7%), salary (57.2%), work schedule flexibility (56.5%) and vacation (53.1%) were ranked closer to the midline. Educational opportunities, educational leave and opportunities for advancement were the dimensions where nurse participants reported having the most dissatisfaction (see Table 9).

Career Satisfaction

Participant satisfaction with choosing nursing as a career was largely positive. Close to two thirds (61.8%) of study respondents were moderately or very satisfied with their career choice. Just over a quarter of the participants expressed feeling a little or very dissatisfied (28.2%) with their choice of nursing as a career (see Table 10).

Table 9: Job Satisfaction

Work schedule flexibility	
Moderately or very satisfied	56.5%
A little or very dissatisfied	43.5%
0	
Opportunities for advancement	75.00/
Moderately or very satisfied	35.9% 64.0%
A little or very dissatisfied	64.0%
Independence at work	
Moderately or very satisfied	78.8%
A little or very dissatisfied	21.1%
Professional status	
Moderately or very satisfied	77.4%
A little or very dissatisfied	22.6%
Salary	
Moderately or very satisfied	57.2%
A little or very dissatisfied	42.7%
Educational opportunities	
Moderately or very satisfied	42.5%
A little or very dissatisfied	57.5%
, made of very discussioned	57.676
Vacation	
Moderately or very satisfied	53.1%
A little or very dissatisfied	46.9%
Sick leave	
Moderately or very satisfied	60.7%
A little or very dissatisfied	39.3%
•	
Education leave	
Moderately or very satisfied	42.2%
A little or very dissatisfied	58.7%

Table 10: Career Satisfaction

Career satisfaction	
Moderately or very satisfied	61.8%
A little to very dissatisfied	28.2%

Burnout

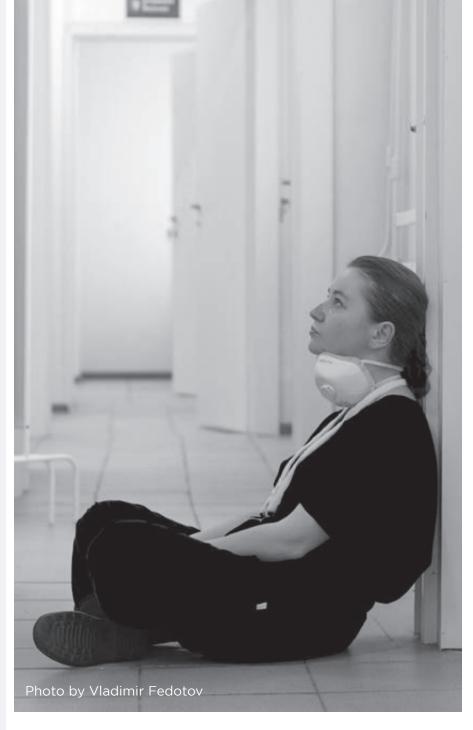
syndrome that occurs from chronic interpersonal stressors on the job, is often exhibited through three dimensions: emotional exhaustion -'overwhelming exhaustion', depersonalization - 'feelings of cynicism and detachment from the job' and decreased personal achievement - 'a sense of ineffectiveness and lack of accomplishment'.37 Almost two thirds (65.3%) of study respondents reported high levels of emotional exhaustion, while half (50.2%) reported feeling high levels of depersonalization (see Table 11). Higher scores on these two subscales correspond to higher degrees of experienced burnout.³⁶ Less than half (42.5%) of study participants had high levels of efficacy or personal achievement, where lower

scores on this subscale reflect higher degrees of burnout.³⁷

Burnout, considered to be a

Table 11: Burnout

Burnout	
High levels of emotional exhaustion	65.3%
High levels of depersonalization	50.2%
High levels of decreased personal achievement	42.5%





The overall aim of this study was to obtain a description from Canada's nurses of their perceptions of current work environments. Participants in this study came from across 13 provinces/territories, although a quarter were from Alberta, and more than 10% came from each of Quebec, British Columbia, Ontario and Nova Scotia. The demographic profile of nurse participants in this study is similar in age, gender and work experience to that of Canada's regulated nursing professionals as outlined in a recent report on Canada's nursing workforce.³⁸ The majority of study participants were Anglophone nurses educated in Canada, with close to half having a baccalaureate degree in nursing. Most were registered nurses working in full-time positions in hospitals, with higher percentages of study participants coming from these categories in comparison to Canada's overall workforce.38

Quality of Care and Patient Safety

Nurse perceptions of patient care have been reported to be a reliable indicator of quality when compared with process of care and patient outcomes.39 The majority of nurses in this study had positive perceptions about the overall quality of care being provided in their work setting, although over a quarter gave it a fair or poor rating. However, twenty percent more nurses in this study provided unfavourable ratings for quality of care than Canadian nurse respondents to the international study (11%) conducted two decades ago.⁴⁰ Similarly, close to 20% fewer study respondents participating in the 2005 cross-sectoral Canadian NSWHN (11.9%) rated the care delivered by their team as fair to poor

than in this study.⁷ In addition, just over a third of respondents in the earlier international study rated the quality of care as excellent,²⁶ much higher than participants in this study, where less than a quarter gave high rankings. This difference may suggest that although positive overall, a shift in nurse perceptions of the quality of care being provided in Canada's health care settings has occurred over time.

Perceptions of patient safety were quite positive in this study, with over three quarters of participants ranking it as acceptable, very good or excellent. Less than a quarter of nurse participants rated patient safety in their workplace as poor or gave it a failing grade. This is in between the prevalence reported in a US study using this survey instrument conducted across four states from 2005-2008, where almost a third of nurse respondents provided an unfavourable grade on patient safety,41 and the European Union RN4Cast studies, where just 7% provided poor/failing patient safety grades for their work settings.³¹ Differences between the results between countries may be attributed to variations in systems and practices of care delivery across countries.

The specific aspects of patient care quality that concerned study participants the most were communication-oriented, with half reporting nurse-tonurse communication issues such as things falling between the cracks when patients are transferred between units and information getting lost during shift changes. At the same time, close to two thirds noted having communication systems in place to discuss ways of preventing future errors in patient care. Communication between management and

nurses appears to be more problematic in this study as just over a third of participants were made aware of changes being implemented as a result of patient safety event reports, and half do not feel they are working in a culture that allows them to ask guestions of management about decisions or actions being made. Of greatest concern is that close to a half of study respondents report working in a punitive workplace culture as they feel their mistakes are held against them. As further evidence of the discord in management and staff relations, study participants were rather evenly split on whether the actions of their management team reflect a priority towards patient safety.

Quality of Work Environments

Two thirds of study participants rated the overall quality of the work environment where they were employed as fair or poor, with over a quarter of these ratings being poor. Specific aspects of the work environment that support nursing professional practice environments that were favourably rated by nurses in this study included having collegial working relationships between nurses and physicians and an environment that emphasizes the nursing-based foundations of patient care. Both of these dimensions of care have been identified in previous Canadian studies as important characteristics of positive work environments,7,9,28,29 with similar scoring on the subscales reported in the international comparative study.²⁸ Decades of research conducted on Magnet hospitals in the US have demonstrated that positive nurse-physician relationships are related to nurses' job

satisfaction.^{35,36} This was reinforced in Canada's NSWHN, which reported that nurse perceptions of working relations with physicians were overwhelmingly positive: with over three quarters reporting good relations, a lot of teamwork, and collaboration between nurses and physicians.⁷

Factors considered to have an unfavourable influence on work environments by participants in this study were the extent to which nurses participate in how their work environments are managed, the supports and abilities of their managers and leaders, and the adequacy of staffing resources available to them. Previous Canadian research also reported concerns with resource adequacy, including the earlier international work conducted in 1999,26 where more than one-third of respondents reported problems with inadequate staffing. A 2012 report by the CFNU on nursing workload and patient care emphasized the need to develop safe staffing models.⁴² More recently, in a 2013 Canadian Broadcasting Corporation (CBC) survey of nurses examining Canada's health care, 'about 60 per cent of nurses responding said there was not enough staff for them to properly do their iobs'.43 A newly released study commissioned by the CFNU examining nurses' mental health in Canada also reported that nurses described the regular staffing levels of health care staff in their workplaces were 'insufficient or inappropriate in meeting the needs of patients'.1

Perceptions of nurse manager ability, leadership and support for nurses received unfavourable ratings by participants in this study. Participants highlighted lack of support from management for pursuit of ongoing

education, including leave for educational purposes, as well little or no opportunity for advancement. In contrast, the majority of nurses who participated in the 2005 NSWHN had a positive view of their supervisor, with close to three quarters reporting that their nurse manager or immediate supervisor was a good manager and leader.7 A 2014 CFNU report on work redesign within the context of patient safety reinforced the need for health care organizations to strive for Magnet-like work environments, emphasizing effective nursing leadership as well as staffing adequacy.44 Recent work emerging from the RN4Cast consortium has reported links between nursing and hospital management, perceptions of quality of care and the personal accomplishment dimension of burnout.45

Interactions with Patients and Families

Concerns related to interactions with patients and families were also noted by nurses participating in this study, with more than a quarter indicating they received daily to weekly patient complaints. Of greater concern was the identification by half of study participants of verbal abuse occurrences as daily to weekly. These findings are not new, as close to four out of ten nurse participants in the 2005 NSWHN reported occasional or frequent complaints from patients/patient families, as well as close to half reported emotional abuse.7 Findings from the international study

conducted in 1999 indicated that just under half of Canadian nurse participants reported that complaints from patients or families were not infrequent, while close to two thirds reported frequent verbal abuse to nurses from patients or families.²⁶ Canada had the highest percentage of nurses from across three countries in that study reporting verbal abuse.²⁶

Physical abuse was less prevalent in this study, although half of the participants had experienced physical abuse from patients and/or families ranging from daily to once a month. This is higher than reported in the 2005 NSWHN, where just over a quarter of nurse respondents reported that they had been physically assaulted by a patient in the previous year.7 The 2005 report of nurses from across different occupational groups in Canada also reported verbal aggression, physical assault, threat of assault and emotional abuse across all health care work sectors - the majority coming from patients and/or families.9 A 2015 study examining the workplace violence experiences of nurses in British Columbia found that nurses were exposed to workplace violence a few times a year, reported high levels of emotional exhaustion, experienced musculoskeletal injuries and anxiety at least monthly, and sleep disturbances a few times a month.23

A discussion paper released by the CFNU in 2017 highlighted the escalation in violence that nurses are experiencing in Canada and provided a snapshot of the scope of this issue, using reports from the provincial and territorial nursing unions.46 More broadly, in CFNU's (2017) membership survey, almost two thirds of respondents reported experiencing at least one workplace violence incident such as physical assault, verbal or emotional abuse, bullying and racial/sexual harassment in the previous year.46 Aimed to be a call for action to stop nursing workplace violence in health care in Canada, it is clear from the findings from our current study that frequent problems with verbal abuse and complaints continue to persist today, as well as physical abuse.

Work-related physical injuries were also less prevalent than verbal abuse in this study, vet half of the participants reported experiencing injuries from daily to once a month. This is substantially more than the 9% who reported having been injured on the job in the past year in the NSWHN.7 Ongoing assessment of work-related physical injuries will be important to monitor in the future to determine if this report is an anomaly, or whether further trends emerge that would benefit from in-depth examination.

Work Satisfaction, Turnover Intent and Career Satisfaction

Over half of nurses participating in the study reporting dissatisfaction with their current job, and close to two thirds indicated that they planned to

leave their current job within the next year as a result of job dissatisfaction. Satisfaction with work is comprised of factors relating to the job itself as well as the work environment. Over two thirds of participants in this study were satisfied with the professional concepts of the nursing role, such as control and independence in work as well as the professional status of the nursing role. At the same time, just over half of participants were satisfied with remuneration and flexibility of work schedules. Less than half of nurse participants in this study were satisfied with educational opportunities, educational leave and opportunities for advancement. Reports of job dissatisfaction were higher in this study than reported in the 1999 international nursing survey, where a third of Canadian nurse participants were not satisfied,40 while just over ten percent of participants in the NSWHN in 2005 reported being dissatisfied with their work.7

Intent to leave was substantially higher in the current study with over half of participants planning to leave their position in the next year. Of these, the majority plan to seek another nursing job, although over a quarter expect to seek work outside of nursing. In comparison, in the previous international study it was reported that less than 20% of the Canadian nurse respondents were planning to leave work in the upcoming year.²⁵ Reports of turnover intention by European nurses across ten countries in the 2010 RN4Cast study were lower, with only 9% indicating they intended to leave.⁴⁷





Nurses do the same amount of work in a shorter period of time, and the cycle of admissions and discharges is more rapid...



The majority of study participants were satisfied with their choice of nursing as a career, while just over a quarter expressed some dissatisfaction with their career choice. In comparison, far fewer nurse participants (9.7%) in the NSWHN expressed dissatisfaction with nursing as a profession.⁷

Burnout

Three dimensions of burnout were examined in this study emotional exhaustion, depersonalization and personal accomplishment.37 Emotional exhaustion assesses nurse participant feelings of being emotionally extended and exhausted from work, while depersonalization captures when they are becoming unfeeling or impersonal towards their patients, and personal accomplishment reflects the feelings of competence with successfully accomplishing and achieving their work goals.³⁷ Participants in this study reported high levels of experienced burnout overall, with high levels of emotional exhaustion and moderate levels of depersonalization and personal achievement. Burnout

has been identified as a major concern for nurses in Canada. with earlier reports from the international study indicating that almost half of Canadian nurse participants had burnout above the norms for medical personnel, with ratings for the specific burnout dimensions quite similar to respondents in this study.^{25,26} Further research using the Canadian nurse data from the international study found that emotional exhaustion was directly related to staffing adequacy.27 A 2008 study of 667 nurses across four provinces in Atlantic Canada also found that burnout was a predictor of turnover intention as emotional exhaustion predicted depersonalization, which predicted the feeling of inefficacy in study participants.48 In addition, a 2015 study examining the workplace violence experiences of nurses in British Columbia found that higher levels of emotional exhaustion were associated with intention to leave, and workload was the most frequent reason cited for intention to leave.22, 23

These findings correspond with results of a number of studies from the international RN4Cast consortium, confirming that burnout is related to quality of nursing care and nursing

job outcomes, including job satisfaction and turnover intention. ^{45,49} Further research comparing nurse data from nine countries suggests that higher burnout scores from Canadian nurses may be a result of shortened average length of hospital stays as "nurses do the same amount of work in a shorter period of time, and the cycle of admissions and discharges is more rapid", placing substantial burden on nurses. ⁴⁹

Public awareness of nurse burnout in Canada was highlighted in a 2013 report on hospital health care, led by the Canadian Broadcasting Corporation (CBC), where over 40% of the over 4,500 nurse respondents indicated that they were burned out.43 More recently, in a Canadian survey of nurses mental health, conducted in 2019, close to two thirds of study respondents reported having some symptoms of burnout, while over a quarter more had burnout symptoms that needed intervention.1



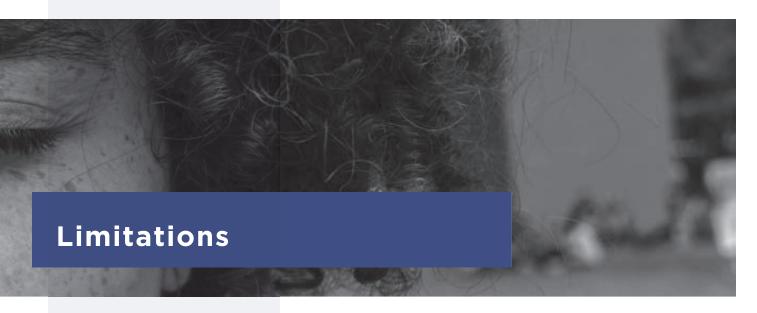
Canadian nurses are expressing greater concern with the quality of patient care than seen in previous studies, a change which have evolved over time. Patient safety issues are less evident, although an awareness of health systems gaps such as nurse-to-nurse communication during care transfers and shift changes was highlighted. Of concern was poor communication between management and staff nurses and the resulting punitive culture that ensues. Given this climate, the quality of workplace environments was noted to be quite poor, with concern expressed related to management capability and subsequent supports provided to nurses, especially related to ongoing educational development and opportunities for advancement. Of greatest concern in this study is the high level of verbal abuse and complaints, as well as an escalating picture of physical assault occurrences - all coming from patients and families. Not surprisingly, high levels of burnout exist with these nurses. along with high levels of dissatisfaction and large numbers planning to leave their position and/or the profession. While overall satisfaction with nursing

as a career remains strong, it is clear from these study results that the trends being seen in nursing work environments in this study cannot continue for the workforce to be maintained.

The supply of nurses is a concern for health systems globally, as identified in the recent World Health Organization (WHO) report, which projected a shortage of 5.9 million nurses in 2018, particularly in low- and middle-income countries.50 An aging nurse workforce in the WHO American region, where Canada falls, and the European region may also affect supply longitudinally. Canada's nursing supply grew by 1.9% from 2018 to 2019, although a downward trend is evident over the past five years and may continue due to an aging workforce.³⁸ These numbers only capture one aspect of nursing in Canada, the supply of regulated nurses. They do not account for the very real challenges experienced by nurses in Canada's system of care delivery during normal times - challenges that are compounded during disasters and unexpected health events. This was apparent in 2003 with the global epidemic of severe

acute respiratory syndrome (SARS).51 The virus impacted health workers in Canada greatly as it compromised their safety as well as caused burnout and psychological distress.⁵² Nearly two decades later, another debilitating coronavirus, COVID-19, emerged that required the WHO to declare a global public health pandemic on March 11, 2020.53 The COVID-19 pandemic has drawn a great deal of public attention to health care, and in particular to nurses and nurses' health and safety in workplaces.

This study was conducted just before the COVID-19 pandemic was declared. Study findings provide a disturbing picture of nursing work environments in Canada, one that has, no doubt, worsened during the pandemic. While primarily related to the supply of nurses, the WHO report on the state of the world's nursing, released in April of this year, identifies that countries need to invest in enabling working conditions for nurses.⁵⁰ The year 2020 was designated by the WHO as the international year of the nurse and midwife, so the time to address these concerns is now.



This study provides a snapshot of Canadian nurses' perspectives at one point in time. It is likely that work environment perceptions change over time due to contextual influences ranging from local working conditions, structural health system changes, and global factors such as the COVID-19 public health pandemic. Comparison with studies obtained in different historical contexts or countries should be interpreted with this in mind.

Nurses in this study may not be representative of all nurses at a national or provincial level in Canada. The sampling frame consisted of all working regulated nurses who were members of nursing unions across the country that are affiliated with the CFNU, as well as the non-CFNU member nurses unions in Quebec and British Columbia, and other relevant nursing professional associations - which may have excluded nurses not currently practising or on leave from work (e.g., maternity or disability leave) and those not represented by a nursing union. As the names and contact information of the nurses were not available to the researchers, a convenience sample was

obtained based on nurses volunteering to participate, as opposed to random sampling. As a result, it is likely that the sample was affected by self-selection. For example, some nurses may have been more motivated to complete the survey given different political and contextual factors in various provinces at the time of the study, including cutbacks to health care funding during the study period (e.g., Ontario, Alberta). These factors could have equally discouraged other nurses from participating due to the survey time commitment and their increasing workloads. Future research should consider using methods that allow for the construction of a random sample. In addition, the nurse survey was administered to Ontario nurses in early 2019 as part of a different study, thus the number of responses from Ontario at this time may be lower than normal.

A disproportionately higher percentage of nurses in the study were full-time registered nurses in hospitals, compared to the proportion found across Canada, which means that nurses working in the long-term care and community sectors were underrepresented. As the

latter groups of nurses may experience different work environment challenges, it will be important that nursing sectors are sampled proportionately in future research.

Just under two thirds of the sample provided complete data on all the variables measured in the survey. As a result, the sample composition changes from variable to variable, making comparisons across the different indicators challenging.

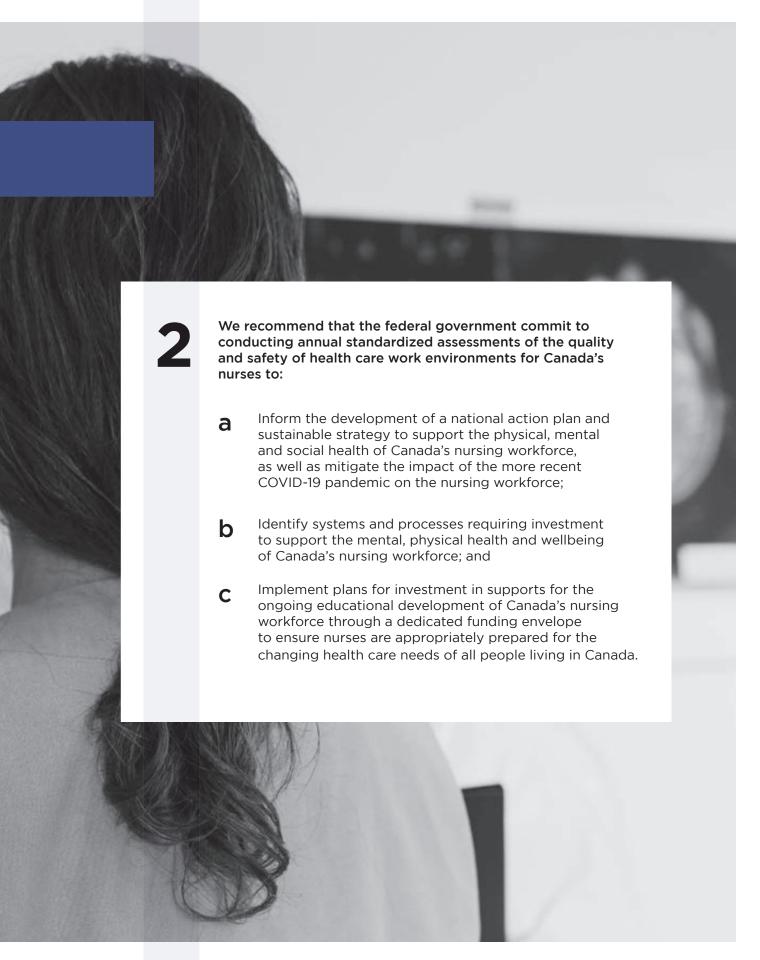
Finally, data collection was halted earlier than planned when the WHO announced that the COVID-19 coronavirus outbreak was a global pandemic, thus the sample may have been larger had subject recruitment continued.

Recommendations

We provide two recommendations from this report:

- We recommend that the Federal government establish a permanent National nursing bureau/office and appoint a nurse leader in the federal government to:
 - **a** Build and advise the federal government on nursing and health care policy in Canada;
 - b Liaise with provincial and territorial principal/ chief nurses to present a unified nursing voice on political and policy agendas to inform public and population health policies and programs; and
 - Lead a national advisory committee committed to planning and securing Canada's nursing health and human resource needs across sectors to support the health and health care needs of all people living in Canada.

Photo by Shopify Partners



References

- 1. Stelnicki, A., Carleton,
 N., & Reichert, C. (2020).

 Mental Disorder Symptoms
 Among Nurses in Canada.
 Ottawa, ON: Canadian
 Federation of Nurses
 Unions. Retrieved June
 8, 2020, from: https://
 nursesunions.ca/wp-content/uploads/2020/06/
 OSI report final.pdf
- 2. Canadian Institute for Health Information (CIHI). (2001). Future Development of Information to Support the Management of Nursing Resources: Recommendations.
 Ottawa, ON: CIHI. Retrieved June 8, 2020, from: https://secure.cihi.ca/free_products/FutureDev.pdf
- 3. Canadian
 Intergovernmental
 Conference Secretariat.
 (2000). News Release:
 First Ministers Meeting
 Communique on Health
 (800-038). Ottawa, ON:
 Government of Canada,
 September 20, 2000.
 Retrieved June 8, 2020,
 from: https://scics.ca/
 en/product-produit/
 news-release-first-ministers-meeting-communique-on-health/
- 4. Government of Canada (2006). Nursing Issues: Mission, Mandate, Functions, Key Activities and Current Priorities of the Office of Nursing Policy. Ottawa, ON:

- Government of Canada. Retrieved June 8, 2020, from: https://www. canada.ca/content/dam/ hc-sc/migration/hc-sc/ hcs-sss/alt_formats/ hpb-dgps/pdf/nurs-infirm/2006-mandat-eng.
- 5. Advisory Committee on Health Human Resources. (2000). The Nursing Strategy for Canada. Ottawa, ON: Government of Canada, October 2000. Retrieved June 8, 2020, from: https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/hcs-sss/alt_formats/hpb-dgps/pdf/pubs/2000-nurs-infirm-strateg/2000-nurs-infirm-strateg-eng.pdf
- 6. Health Canada (2002). Our Health, Our Future: Creating Quality Workplaces for Canadian Nurses. A Report of the Canadian Nursing Advisory Committee. Ottawa, ON: Health Canada. Retrieved June 8, 2020, from: https://www.canada. ca/content/dam/hc-sc/ migration/hc-sc/hcs-sss/ alt formats/hpb-dgps/ pdf/pubs/2002-cnaccccsi-final/2002-cnaccccsi-final-eng.pdf
- 7. Shields, M. & Wilkins, K. (2006). Findings from the 2005 National Survey of the Work and Health of Nurses (NSWHN).
 Ottawa, ON: Statistics Canada/Ministry of

- Industry, December 2006. Retrieved June 8, 2020, from: https://secure. cihi.ca/free_products/ NHSRep06_ENG.pdf
- 8. O'Brien-Pallas, L., Pringle, D., Tomblin Murphy, G., Birch, S., White, S., McGillis Hall, L., Hayes, L., Kephart, G., Baumann, A., Wang, S. & Higgin, A. (2004). Building the Future: An integrated strategy for nursing human resources in Canada - Research Synthesis Report of Research Findings. Ottawa, ON: The Nursing Sector Study Corporation/Canadian Nurses Association. Retrieved June 8. 2020, from: https:// www.researchgate.net/ publication/271645730 Building_the_future_ An_integrated_strategy_ for nursing human resources_in_Canada_ Research_Synthesis_ Report
- O'Brien-Pallas, L., Tomblin Murphy, G., Laschinger, H., White, S., Wang, S. & McCulloch, C. (2005). Canadian Survey of Nurses from Three Occupational Groups. Ottawa, ON: The Nursing Sector Study Corporation.
- 10. Kerr, M.S., Laschinger, H.S., Severin, C.N., Almost, J.N., Thomson, D., O'Brien-Pallas, L., Shamian, J., McPerson, D., Koehoorn, M. & LeClair, S. (2002).

- Monitoring the Health of Nurses in Canada. Ottawa, ON: Canadian Foundation for Innovation (formerly Canadian Health Services Research Foundation).
- 11. Canadian Institute for Health Information (CIHI). (2013). Regulated Nurses Database Data Element List. Ottawa, ON: CIHI; 2013. Retrieved June 8, 2020, from: https://www.cihi.ca/sites/default/files/document/nursing_data_element_en.pdf
- 12. Canadian Council of Health Services Accreditation (CCHSA). (2007). Within Our Grasp: A Healthy Workplace Action Strategy for Success and Sustainability in Canada's Healthcare System. Ottawa, ON: CCHSA. Retrieved June 8, 2020, from: https:// www.cna-aiic.ca/-/media/ cna/page-content/ pdf-en/17---2007_qwqhc_ within_our_grasp_e. pdf?la=en&hash=8BEF5F-33B0C28F333D5CC6AC-8DC0C02AD1BECB6D
- 13. Accreditation Canada. (2020). The Qmentum Accreditation Program.
 Ottawa, ON: Accreditation Canada. Retrieved June 8, 2020, from: https://accreditation.ca/accreditation/gmentum/
- 14. Canadian Nurses
 Association. (2012). A
 Nursing Call to Action.

- Ottawa, ON: Canadian Nurses Association, September 2012. Retrieved June 8, 2020, from: https://www.cna-aiic. ca/-/media/cna/files/en/ nec_report_e.pdf?la=en& hash=3659EA41A22369A F14FFD057284414B264F D58E0
- 15. Doran, D., McGillis Hall, L., Irvine, D., Baker, G.R., Pink, G., Sidani, S., O'Brien Pallas, L., & Donner, G. (2001). Nursing staff mix and patient outcome achievement: The mediating role of nurse communication. International Nursing Perspectives, 1 (2-3), 74-83.
- McGillis Hall, L., Doran, D., Baker, G.R., Pink, G., Sidani, S., O'Brien Pallas, L., & Donner, G. (2003) Nurse staffing models as predictors of patient outcomes. Medical Care, 41 (9), 1096-1109.
- 17. McGillis Hall, L. (2003). Nursing staff mix models and outcomes. *Journal of Advanced Nursing*, 44 (2), 217-226.
- 18. McGillis Hall, L., Doran, D., & Pink, G. (2004). Nurse staffing models, nursing hours and patient safety outcomes. *Journal of Nursing Administration, 34* (1), 41-45.
- 19. McGillis Hall, L., & Doran, D. (2004). Nurse staffing,

- care delivery model and patient care quality.

 Journal of Nursing Care

 Quality, 19 (1) 27-33.
- 20. Doran, D., Harrison, M.B., Laschinger, H., Hirdes, J., Rukholm, E., Sidani, S., McGillis Hall, L., Tourangeau, A., & Cranley, L. (2006). Relationship between nursing interventions and outcome achievement in acute care settings. Research in Nursing and Health, 29, 61-70.
- 21. Laschinger, H., Wong, C. & Greco, P. (2006). The impact of staff nurse empowerment on person-job fit and work engagement/burnout. Nursing Administration Quarterly, 30 (4), 358-367.
- 22. MacPhee, M., Dahinten, S. & Havaei, F. (2017). The impact of heavy perceived nurse workloads on patient and nurse outcomes. *Administrative Sciences*, 7,(7);7010007.
- 23. Havaei, F., MacPhee, M. & Dahinten, S. (2016). RNs and LPNs: emotional exhaustion and intention to leave. *Journal of Nursing Management*, 24, 393–399.
- 24. Havaei, F., Astivia,
 O.L.O. & MacPhee, M.
 (2020). The impact of
 workplace violence on
 medical-surgical nurses'
 health outcome: a moderated mediation model

- of work environment conditions and burnout using secondary data. International Journal of Nursing Studies, 109, 103666.
- 25. Aiken, L.H., Clarke, S.P. & Sloane, D. M. (2002). Hospital staffing, organization, and quality of care: cross-national findings. *Nursing Outlook*, 50, 187-194.
- 26. Aiken, L.H., Clarke, S.P., Sloane, D. M., Sochalski, J.A., Busse, R., Clarke, H., Giovannetti, P., Hunt, J., Rafferty, A.M., & Shamian, J. (2001). Nurses' reports on hospital care in five countries. *Health Affairs*, 20 (3), 43-53.
- 27. Laschinger, H.S. & Leiter, M.P. (2006). The impact of nursing work environments on patient safety outcomes. *Journal of Nursing Administration*, *36* (5), 259-267.
- 28. Leiter, M. P. & Laschinger, H. (2006). Relationships of work and practice environments to professional burnout. *Nursing Research*, 55 (2), 137-146.
- 29. Estabrooks, C., Midodzi, W.K., Cummings, G.G., Ricker, K.L. & Giovannetti, P. (2005). The impact of hospital nursing characteristics on 30-day mortality. *Nursing Research*, *54* (2), 74-84.

- 30. Sermeus, W., Aiken,
 L.H., Van den Heede, K.,
 Rafferty, A.M., Griffiths,
 P., Moreno-Casbas, M.T.,
 Busse, R., Lindqvist, R.,
 Scott, A. P., Bruyneel, L.,
 Brzostek, T., Kinnunen,
 J., Schubert, M.,
 Schoonhoven, L., Zikos,
 D. and the RN4Cast
 consortium. (2011). Nurse
 forecasting in Europe
 (RN4Cast): Rationale,
 design and methodology.
 BMC Nursing, 10 (6), 1-9.
- 31. Aiken, L.H., Sloane, D., Griffiths, P., Rafferty, A.M., Bruyneel, L., McHugh, M., Sermeus, W. for the RN4Cast Consortium. (2016). Nursing skill mix in European hospitals: Crosssectional study of the association with mortality, patient ratings, and quality of care. BMJ Quality and Safety, 26, 559-568.
- 32. Aiken, L.H., Sloane, D.M., Bruyneel, L., Van den Heede, K., Griffiths, P., Busse, R., Diomidous, M., Kinnunen, J., Kozka, M., Lesaffre, E., McHugh, M., Moreno-Casbas, M.T., Rafferty, A.M., Schwendimann, R., Scott, P.A., Tiscelman, C., van Achterberg, T., & Sermeus, W. for the RN4Cast Consortium. (2014). Nurse staffing and education and hospital mortality in nine European countries: A retrospective observational study. Lancet, 383 (9931), 1824-1830.

- 33. Aiken, L.H., Clarke, S.P., Sloane, D.M., Sochalski, J., & Silber, J.H. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. JAMA, 288,1987-1993.
- 34. Aiken, L.H., Clarke, S.P., Sloane, D.M., Lake, E.T., & Cheney, T. (2008). Effects of hospital care environment on patient mortality and nurse outcomes. Journal of Nursing Administration, 38, 223-229.
- 35. Lake ET. (2002).
 Development of the practice environment scale of the Nursing Work Index. Research in Nursing & Health. 25 (3),176-88.
- 36. Lake, E. (2007). The nursing practice environment. Measurement and evidence. Medical Care Research and Review, 64 (2), 104S-122S.
- 37. Maslach, C., & Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour, 2*, 99-113.
- 38. Canadian Institute for Health Information (CIHI). (2020). Nursing in Canada, 2019. Ottawa, ON: CIHI. Retrieved June 8, 2020, from: https://www.cihi.ca/en/nursing-in-canada-2019
- 39. McHugh, M. & Stimpfel, A., W. (2012). Nurse reported

- quality of care: a measure of hospital quality. Research in Nursing and Health, 35, 566-575.
- 40. Aiken, L.H., Sloane, D.M., Clarke, S.P., Poghosyan, L., Cho, E., You, L., Finlayson, M., Kanai-Pak, M. & Aungsuroch, Y. (2011). Importance of work environments on hospital outcomes in nine countries. International Journal of Quality in Health Care. 23 (4), 357-364.
- 41. Aiken, L.H., Sloane, D.M., Barnes, H., Cimiotti, J.P., Jarrin, O.F. & McHugh, M. (2018). Nurses' and patients' appraisals show patient safety in hospitals remains a concern. *Health Affairs*, *37* (11), 1744-1751.
- 42. Berry, L. & Curry, P. (2012). Nursing Workload and Patient Care: Understanding the Value of Nurses, the Effects of Excessive Workload. and How Nurse-Patient Ratios and Dynamic Staffing Models Can Help. Ottawa, ON: Canadian Federation of Nurses Unions. Retrieved July 20, 2020, from: https:// nursesunions.ca/wp-content/uploads/2017/07/ cfnu_workload_printed_ version_pdf.pdf
- 43. Hildebrandt, A. (2013). Nearly 25% of Canadian nurses wouldn't recommend their hospital: Burnout plagues about

- 40% of respondents, CBC survey suggests. Ottawa, ON: Canadian Broadcasting Corporation. Retrieved June 8, 2020, from: https://www.cbc.ca/ news/health/nearly-25-ofcanadian-nurses-wouldnt-recommend-their-hospital-1.1304601
- 44. MacPhee, M. (2014).

 Valuing Patient Care:

 Responsible Workforce

 Design. Ottawa, ON:

 Canadian Federation of

 Nurses Unions. Retrieved

 July 20, 2020, from:

 https://nursesunions.

 ca/wp-content/

 uploads/2017/05/

 Valuing-Patient-SafetyPRINT-May-2014.pdf
- 45. Van Bogaert, P., Kowalski, C., Weeks, S.M., Van heusden, D. & Clarker, S. P. (2013). The relationship between nurse practice environment, nurse work characteristics, burnout and job outcome quality of nursing care: A cross-sectional survey. International Journal of Nursing Studies, 50, 1667-1677.
- 46. Canadian Federation of Nurses Unions. (2017). Enough Is Enough Putting a stop to violence in the health care sector A discussion paper. Retrieved March 25, 2020, from https://nursesunions.ca/wp-content/uploads/2017/05/CFNU_Enough-is-

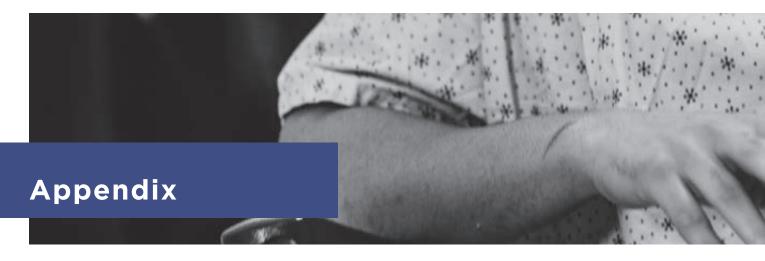
- Enough_June1_FINALlow.pdf
- 47. Heinen, M., van Acterberg, T., Schwendimann, R., Zander, B., Matthews, A., Kozka, M., Ensio, A., Sjetne, I.S., Casbas, T. M., Ball, J. 7 Schoonhoven, L. (2013) Nurses' intention to leave their profession: a cross sectional observational study in 10 European countries. International Journal of Nursing Studies 50, 174–184.
- 48. Leiter, M. & Maslach, C. (2009). Nurse turnover: the mediating role of burnout. *Journal of Nursing Management*, 17, 331-339.
- 49. Poghosyan, L., Aiken, L.H. & Sloane, D. M. (2009). Factor structure of the Maslach burnout inventory: An analysis of data from large scale cross-sectional surveys of nurses from eight countries. International Journal of Nursing Studies, 46, 894-902.
- 50. World Health Organization (WHO). (2020a). State of the World's Nursing 2020: Investing in Education, Jobs and Leadership.
 Geneva, SW: World Health Organization.
 Retrieved June 8, 2020, from: https://www.who.int/publications/i/item/nursing-report-2020
- 51. World Health Organization (WHO). (2020a). SARS

- (Severe Acute Respiratory Syndrome). Retrieved April 1, 2020, from https:// www.who.int/ith/diseases/ sars/en/
- 52. Maunder, R.G., Lancee, W.J., Balderson, K.E., Borgundvaag, B., Evans, S., Fernandes, C.M., ... Masylenki, D.A. (2006). Long-term psychological and occupational effects of providing hospital healthcare during SARS outbreak. *Emerging Infectious Diseases, 12* (12), 1924-1932.
- 53. World Health Organization (WHO). (2020b). WHO Director-General's opening remarks at the media briefing on COVID-19 11 March 2020. Retrieved June 8, 2020, from: https://www.who.int/dg/speeches/detail/who-director-general-sopening-remarks-at-themedia-briefing-on-covid-19---11-march-2020
- 54. Bruyneel, L., Van den Heede, K., Diya, L., Aiken, L. & Sermeus, W. (2009). Predictive validity of the International Hospital Outcomes Study questionnaire: an RN4CAST pilot study. *Journal of Nursing Scholarship*, 41, 202-210.
- 55. Bruyneel, L., Li, B., Ausserhofer, D., Lesaffre, E., Dumitrescu, I., Smith, H.L., Sloane, D.M., Aiken, L.H. & Sermeus, W. (2015).

- Organization of hospital nursing, provision of nursing care, and patient experience with care in Europe. Medical Care Research and Review, 72 (6), 643-664.
- 56. Aiken, L.H., Sloane, D.M., Bruyneel, L., Van den Heede, K. & Sermeus, W & the RN4Cast Consortium. (2013). Nurses' reports of working conditions and hospital quality of care in 12 countries in Europe. International Journal of Nursing Studies, 50, 143-153.
- 57. Aiken, L. H., Sermeus, W., Van den Heede, K., Sloane, D.M., Busse, R., McKee, M., Bruyneel, L., Rafferty, A.M., Griffiths, P., Moreno-Casbas, M.T., Tishelman, C., Scott, A., Brzostek, T., Kinnunen, J., Schwendimann, R., Heinen, M., Zikos, D., Sjetne, I.S., Smith, H.L. & Kutney-Lee, A. (2012). Patient safety, satisfaction, and quality of hospital care: cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. British Medical Journal, 344: e1717.
- 58. Warshawsky, N.E. & Havens, D.S. (2011). Global use of the Practice Environment Scale of the Nursing Work Index. Nursing Research, 60 (1), 17-31.

59. Swiger, P.A., Patrician, P.A., Miltner, R.S., Raju, D., Breckenridge-Sproat, S. & Loan, L. (2017). The practice environment scale of the Nursing Work Index: An updated review and recommendations for use. International Journal of Nursing Studies, 74, 76-84.





The nurse survey used in this study is comprised of a comprehensive questionnaire for collecting data from nurses, that has been used for more than two decades in studies that explore the association between nursing work environments, nurse staffing, and nurse as well as patient outcomes.30, ⁵⁴ It consists of the Practice Environment Scale of the **Nursing Work Index** (PES-NWI);35,36 the Maslach Burnout Inventory (MBI);37 demographic questions; and questions on nurses' job, work and employment, as well as questions about nurse-perceived quality of care, patient safety and quality of work environments.30 The international hospital outcomes study (conducted in 1999 and led out of the United States) and the more recent RN4Cast studies (led out of the European Union since 2010) have utilized this instrument and reported reliability and validity of the measures. 25,31,32,54-57

The Practice Environment Scale of the Nursing Work Index (PFS-NWI)35,36 was used to measure elements of nurses' work environments. The revised PES-NWI consists of 32 Likerttype questions (1="strongly disagree" to 4="strongly agree"), including 5 sub-scales: nurse participation in hospital

affairs (8 items); nursing foundations for quality of care (9 items); nurse manager ability, leadership and support of nurses (4 items); staffing and resource adequacy (4 items); and collegial nurse-physician relationships (7 items). The reliability (i.e. Cronbach alpha coefficients) of the PES-NWI subscales vary from 0.71 to 0.84.34 The subscales have showed to have a high predictive validity for workforce stability issues and quality of care in hospitals.35,36 The PES-NWI is widely used in research studies internationally and is endorsed for use by the US National Quality Forum as a national standardized measure of the nursing practice environment, and by the Joint Commission as a screening indicator of staffing effectiveness in hospital accreditation standards and as part of the NDNQI (National Database of Nursing Quality Indicators) annual survey of nurse credentialing for Magnet hospitals.58,59

Burnout has been found to have important negative effects on job satisfaction, nurse turnover and patient satisfaction. The levels of burnout in this study were evaluated using the Maslach Burnout Inventory (MBI).37 The MBI includes 22 items scored on a scale from 1="never" to 6="every day"

and is internationally the most widely used instrument for measuring the phenomenon of work-related burnout. The MBI captures three dimensions of burnout: emotional exhaustion, depersonalization and personal accomplishment.

The survey also includes some items that reflect global ratings of the dimensions being examined, including quality of care, quality of work environments, patient safety ratings, job satisfaction, career satisfaction and turnover intent. Global measures are often chosen when overlap with independent study scales is a consideration. Along with these, similar to the approach used in the EU study,30 several of these areas were explored with additional questions. These included satisfaction with: specific aspects of the job (e.g., work schedule flexibility, opportunities for advancement, remuneration); the nursing work environment (e.g., complaints, verbal and physical abuse, work-related physical injuries); and patient care quality and safety culture (e.g., management of staff errors and related policy changes, information omissions during care transitions, staff relations with management).



This study was conducted just before the COVID-19 pandemic was declared. Study findings provide a disturbing picture of nursing work environments in Canada, one that has, no doubt, worsened during the pandemic.





CANADIAN FEDERATION OF NURSES UNIONS LA FEDERATION CANADIENNE DES SYNDICATS D'INFIRMIÈRES ET INFIRMIÈRS