# A PROVINCIAL STUDY OF NURSES' COVID-19 EXPERIENCES AND PSYCHOLOGICAL HEALTH AND SAFETY IN BRITISH COLUMBIA, CANADA

# **EXECUTIVE SUMMARY**





# **ACKNOWLEDGEMENTS**

This research project was funded by the BC Nurses' Union. The research provides valuable insights into the conditions of nurses' work environments and the state of their psychological health and safety and the quality and safety of their care delivery during the COVID-19 pandemic.

We would like to thank the nurses who participated in this survey study.

# THE RESEARCH TEAM

#### PRINCIPAL INVESTIGATOR

Farinaz Havaei, RN, PhD Assistant Professor UBC School of Nursing 2211 Wesbrook Mall, RM T25 Vancouver, BC, Canada V6T 2B5 farinaz.havaei@ubc.ca

#### **CO-INVESTIGATORS**

Maura MacPhee, RN, PhD Professor UBC School of Nursing

Andy Ma, MERM graduate student UBC School of Educational Psychology

#### **BCNU CONSULTANTS**

Adriane Gear, RN Christine Sorensen, RN

# **Executive Summary**

Results of the Follow-up Provincial Survey

### OVERALL KEY FINDINGS FOR ACTIVE NURSES (N=3676)

This report summarizes findings from a COVID-19 follow-up survey to the psychological health and safety survey study conducted between October and December 2019. The follow-up survey took place between June and July 2020 and included questions from the previous survey and new questions on the COVID-19 pandemic and nurses' work experiences. The executive summary presents results on key variables, such as psychological health and safety, followed by results aggregated by work sector: acute care, community care and long-term care sectors. This section is on Active Nurses (N=3676), nurses who self-reported as actively working at the time of the study, regardless of sector. Demographic comparisons between the study sample and Canadian Institute for Health Information (CIHI)<sup>1</sup> data on the BC nursing workforce showed our sample was representative of provincial nurses with respect to age, gender, professional designation and employment status. Table 1 contains some key findings from the COVID-specific questions. Highlighted cells illustrate findings of potential worry based on percentages of approximately 40% or over.

Table 1. Key findings from COVID-specific questions

Finding	Follow-up % (N=3676)
COVID-19 within the workplace	
Weekly or more frequent direct contact with COVID-19 patients	21
Told to work despite possible or confirmed exposure to COVID-19	24
Experienced symptoms similar to COVID-19	31
Tested for COVID-19	25
Somewhat to extremely concerned about contracting COVID-19 at work	80
Somewhat to extremely concerned about bringing COVID-19 home	86
Inadequate staffing	52
Inadequate/no training to work safely with COVID	34
Disagree that PPE is high quality	49
Disagree that there is sufficient PPE access to perform work safely	42
Time since last N95 fit test $\geq 2$ years or never	20
Not confident in organizational handling of pandemic	25
Not confident in manager's handling of pandemic	28
Not supported by organization during COVID	18
Daily or multiple times a day changes to COVID-19 related protocols and	27
policies	
Transparency on organizational pandemic decisions rated as poor or failing	41
Relationships with colleagues worsened during COVID-19 pandemic	24
Relationships with manager worsened	31
Relationships with rest of team worsened	23

\_

<sup>&</sup>lt;sup>1</sup> Canadian Institute for Health Information. *Nursing in Canada, 2019: A Lens on Supply and Workforce.* Ottawa, ON: CIHI; 2020.

Table 2 compares findings from the original survey and the follow-up survey when applicable. Pink highlighting is used to show worsening findings and green is used to show improving findings.

<u>Areas of worsening</u> included higher levels of poor mental health (anxiety, depression, emotional exhaustion) and general negative treatment in the workplace; and lower quality of nursing care.

<u>Areas of improvement</u> included a decrease in nurses who scored high in depersonalization, decreases in nurses who rated patient safety in their workplace poorly, and decreases in nurses who would not recommend their workplace to friends and colleagues. The prevalence of workplace violence decreased across all types of direct exposure (e.g., physical assault, threat of assault) and indirect exposure (i.e., witnessing workplace violence without being involved). There was also improvement in the prevalence of most negative experiences as a result of exposure to workplace violence, with affirmative response proportions dropping for absenteeism, presenteeism, and physical injury.

Suicide ideation was a new question in the follow-up survey. Nurse responses were compared to national suicide statistics from the Public Health Agency of Canada<sup>2</sup> (See Table 3). Our nurse sample had prevalence rates two to three times higher than the national average for: lifetime suicidal thoughts, plans, and attempts; past year suicidal thoughts.

infographic.html

<sup>&</sup>lt;sup>2</sup> Public Health Agency of Canada. (2020, July 17). Suicide in Canada: Key Statistics. https://www.canada.ca/en/public-health/services/publications/healthy-living/suicide-canada-key-statistics-

Table 2. Key findings on psychological health and safety and quality and safe care provision among follow up survey respondents and baseline survey respondents (when applicable)

Finding	Original %	Follow-up %
	(N=5034)	(N=3676)
Nurse outcomes	1 40	
Meets or exceeds cutoff for PTSD measure	48	47
Moderate to severe anxiety	28	38
Moderate to severe depression	31	41
High emotional exhaustion	56	60
High depersonalization	30	27
Low personal accomplishment	32	33
Alcohol and substance use (over the past six months)		
Drinks alcohol once a week or more		44
Smokes once a week or more		12
Used illegal substances in the past six months		2
Psychological safety at work		
Experienced discrimination	11	15
Experienced bullying or harassment	23	24
Experienced unfair treatment due to mental illness	2	3
Quality and safety of care		
Poor or fair general quality of nursing care	11	14
Poor or fair quality of nursing care last shift	14	15
Failing or poor rating of patient safety	20	14
Would not recommend to friends for care	23	20
Would not recommend to colleagues for work	35	29
Quality, safety, and workload		
Patient incidents involving respondent (% for responses noting	g 'monthly'	
frequency or higher)		
Complaints from patients and/or their families		41
Urinary tract infection		23
Pneumonia		20
Nursing tasks necessary but left undone last shift (% for 'Yes'	' responses)	
Develop or update nursing care plans/pathways		40
Comfort/talk with patients		38
Educating patients and family		26
Non-nursing tasks performed last shift (% for 'Yes' responses	s)	
Clerical duties		71
Obtaining supplies and equipment		66
Housekeeping duties		60
Prevalence of various types of workplace violence (% who reported	some level of expe	erience)
Physical assault	66.0	52.7
Threat of assault	78.0	67.9
Emotional abuse	82.6	73.9
Verbal sexual harassment	54.5	46.7
Sexual assault		7.9
	11.2	1.9
Witnessed workplace violence without being involved (% who response		(1.0
Witnessed workplace violence	72.1	61.0

Not at all/Slight	43.3	49.1
Experiences as a result of exposure to workplace violence		
Absenteeism	43.5	38.0
Presenteeism	62.1	51.4
Medication	35.8	41.3
Insomnia	72.2	71.7
Physical Injury	34.5	33.2
Professional Care/Treatment	36.6	36.5

Table 3. Comparisons of suicide and suicidal ideation findings between national statistics and follow-up survey results

Suicide and suicidal ideation	2020 National % (Public Health Agency of Canada)	Follow-up % (N=3676)
Lifetime		
Has thought about committing suicide	11.8	30
Has made plans for committing suicide	4.0	12
Has attempted suicide	3.1	6
Past 12 months		
Has thought about committing suicide	2.5	8
Has made plans for committing suicide		3
Has attempted suicide		<1

#### KEY FINDINGS FOR ACUTE CARE NURSES (N=2092)

The majority of our sample (57%) was actively working nurses in the acute care sector (N=2092). A number of key findings from the new COVID-19-related questions are shown in Table 4. A comparison of key findings remeasured between the two surveys for acute care sector nurse respondents is shown in Table 5, as well as findings from conceptually relevant items added in the follow-up survey.

Table 4. Follow-up survey key findings for acute care direct care providers

Finding	Follow-up % (N=2092)
COVID-19 within the workplace	
Weekly or more frequent direct contact with COVID-19 patients	28
Told to work despite possible or confirmed exposure to COVID-19	28
Experienced symptoms similar to COVID-19	32
Tested for COVID-19	24
Somewhat to extremely concerned about contracting COVID-19 at work	83
Somewhat to extremely concerned about bringing COVID-19 home	89
Inadequate staffing	49
Inadequate/no training to work safely with COVID	34
Disagree that PPE is high quality	53
Disagree that there is sufficient PPE access to perform work safely	44
Time since last N95 fit test $\geq 2$ years or never	10
Not confident in organizational handling of pandemic	26
Not confident in manager's handling of pandemic	27
Not supported by organization during COVID	18
Daily or multiple times a day changes to COVID-19 related protocols and policies	32
Transparency on organizational pandemic decisions rated as poor or failing	43
Relationships with colleagues worsened during COVID-19 pandemic	21
Relationships with manager worsened	28
Relationships with rest of team worsened	20

<u>Areas of worsening</u> included a higher proportion of nurse respondents that reported higher levels of poor mental health (anxiety, depression, emotional exhaustion), higher levels of general negative treatment in the workplace, and lower quality of general nursing care. Respondents' perception of employer measures to prevent workplace violence also worsened, and the proportion of nurses who had experienced medication use a result of exposure to workplace violence increased.

<u>Areas of improvement</u> identified between surveys included a decrease in nurses who scored high in depersonalization, decreases in nurses who rated patient safety in their workplace poorly, and decreases in nurses who would not recommend their workplace to friends and colleagues. The prevalence of direct and witnessed indirect workplace violence diminished. There was also improvement in the prevalence of most negative experiences as a result of exposure to workplace

violence, with affirmative response proportions dropping for absenteeism, presenteeism, insomnia, and physical injury.

Table 5. Key findings on psychological health and safety and quality and safe care provision among direct care acute nurses who responded to the follow up survey and their peers who

responded to the baseline survey (when applicable)

Finding	Original % (N=3301)	Follow-up % (N=2092)
Nurse outcomes	(21 0002)	(21 2002)
Meets or exceeds cutoff for PTSD measure	49	50
Moderate to severe anxiety	28	40
Moderate to severe depression	31	42
High emotional exhaustion	57	60
High depersonalization	34	32
Low personal accomplishment	34	35
Suicide and suicidal ideation	-	•
Lifetime		
Has thought about committing suicide		31
Has made plans for committing suicide		11
Has attempted suicide		5
Past 12 months		
Has thought about committing suicide		8
Has made plans for committing suicide		2
Has attempted suicide		<1
Alcohol and substance use (over the past six months)		1
Drinks alcohol once a week or more		44
Smokes once a week or more		12
Used illegal substances in the past six months		2
Psychological safety at work		
Experienced discrimination	11	16
Experienced bullying or harassment	23	26
Experienced unfair treatment due to mental illness	2	2
Quality and safety of care		
Poor or fair general quality of nursing care	12	14
Poor or fair quality of nursing care last shift	14	15
Failing or poor rating of patient safety	22	16
Would not recommend to friends for care	23	19
Would not recommend to colleagues for work	37	29
Quality, safety, and workload		
Patient incidents involving respondent (% for responses noting 'i	monthly'	
frequency or higher)		
Complaints from patients and/or their families		39
Pneumonia		25
Urinary tract infection		21
Nursing tasks necessary but left undone last shift (% for 'Yes' re	sponses)	
Develop or update nursing care plans/pathways		41

Comfort/talk with patients		40
Oral hygiene		29
Non-nursing tasks performed last shift (% for 'Yes' responses)		
Clerical duties		74
Obtaining supplies and equipment		74
Housekeeping duties		68
Prevalence of various types of workplace violence (% who reported some	ne level of expe	rience)
Physical assault	74	64
Threat of assault	83	75
Emotional abuse	86	79
Verbal sexual harassment	59	55
Sexual assault	13	10
Witnessed workplace violence without being involved (% who responded yes)		
Witnessed workplace violence	77	68
Employer measures taken to prevent workplace violence		
Not at all/Slight	47	54
Experiences as a result of exposure to workplace violence		
Absenteeism	44	40
Presenteeism	63	51
Medication	36	41
Insomnia 74		72
Physical Injury	37	35
Professional Care/Treatment	35	36

#### KEY FINDINGS FOR COMMUNITY CARE NURSES (N=870)

For this section, nurse respondents who reported themselves as actively working and working in the community care sector were included (24% of the entire sample). A number of key findings from the new COVID-19-related questions for this sector are shown in Table 6. The comparison of key findings between the two surveys for community care sector nurse respondents is shown in Table 7, as well as findings from conceptually relevant items added in the follow-up survey.

Table 6. Follow-up survey key findings for community care nurse respondents

Finding	Follow-up % (N=870)
COVID-19 within the workplace	· ·
Weekly or more frequent direct contact with COVID-19 patients	11
Told to work despite possible or confirmed exposure to COVID-19	18
Experienced symptoms similar to COVID-19	32
Tested for COVID-19	26
Somewhat to extremely concerned about contracting COVID-19 at work	77
Somewhat to extremely concerned about bringing COVID-19 home	82
Inadequate staffing	56
Inadequate/no training to work safely with COVID	35
Disagree that PPE is high quality	43
Disagree that there is sufficient PPE access to perform work safely	39
Time since last N95 fit test $\geq$ 2 years or never	38
Not confident in organizational handling of pandemic	26
Not confident in manager's handling of pandemic	31
Not supported by organization during COVID	19
Daily or multiple times a day changes to COVID-19 related protocols and	
policies	20
Transparency on organizational pandemic decisions rated as poor or failing	41
Relationships with colleagues worsened during COVID-19 pandemic	31
Relationships with manager worsened	35
Relationships with rest of team worsened	28

<u>Areas of worsening</u> included more respondents reporting higher levels of poor mental health (PTSD, anxiety, depression, emotional exhaustion, personal accomplishment), more unfair treatment due to mental illness in the workplace, and lower quality of general and last shift nursing care. Respondents' perception of employer measures to prevent workplace violence also worsened, and the proportion of nurses who had experienced medication use and physical injury as a result of exposure to workplace violence increased.

<u>Areas of improvement</u> included decreases in the proportion of nurses who would not recommend their workplace to friends and colleagues, and decreases in the prevalence of direct and witnessed indirect workplace violence. There was also reduction in the prevalence of most negative experiences as a result of exposure to workplace violence, for absenteeism, presenteeism, and professional care/treatment.

Table 7. Key findings on psychological health and safety and quality and safe care provision among community nurses who responded to the follow up survey and their peers who responded to the baseline survey (when applicable)

to the baseline survey (when applicable)		
Finding	Original % (N=3301)	Follow-up % (N=870)
Nurse outcomes		,
Meets or exceeds cutoff for PTSD measure	44	46
Moderate to severe anxiety	29	37
Moderate to severe depression	30	43
High emotional exhaustion	51	62
High depersonalization	21	22
Low personal accomplishment	25	27
Suicide and suicidal ideation		
Lifetime		
Has thought about committing suicide		31
Has made plans for committing suicide		12
Has attempted suicide		7
Past 12 months		
Has thought about committing suicide		9
Has made plans for committing suicide		3
Has attempted suicide		<1
Alcohol and substance use (over the past six months)		<u> </u>
Drinks alcohol once a week or more		49
Smokes once a week or more		13
Used illegal substances in the past six months		2
Psychological safety at work		
Experienced discrimination	20	19
Experienced bullying or harassment	10	11
Experienced unfair treatment due to mental illness	2	4
Quality and safety of care	<u> </u>	·
Poor or fair general quality of nursing care	8	12
Poor or fair quality of nursing care last shift	10	14
Failing or poor rating of patient safety	11	11
Would not recommend to friends for care	20	17
Would not recommend to colleagues for work	31	29
Quality, safety, and workload		•
Patient incidents involving respondent (% for responses noting 'm	onthly'	
frequency or higher)	•	
Complaints from patients and/or their families		38
Urinary tract infection		17
Patient falls with injury		16
Nursing tasks necessary but left undone last shift (% for 'Yes' resp	oonses)	
Develop or update nursing care plans/pathways		35
Comfort/talk with patients		30
Adequately document nursing care		26
Non-nursing tasks performed last shift (% for 'Yes' responses)		

Clerical duties		69	
Obtaining supplies and equipment		51	
Housekeeping duties		50	
Prevalence of various types of workplace violence (% who reported son	me level of expe	rience)	
Physical assault	29	18	
Threat of assault	59	45	
Emotional abuse	72	61	
Verbal sexual harassment	40	31	
Sexual assault	4	2	
Witnessed workplace violence without being involved (% who respond	led yes)		
Witnessed workplace violence 52			
Employer measures taken to prevent workplace violence			
Not at all/Slight	33	42	
Experiences as a result of exposure to workplace violence			
Absenteeism	41	34	
Presenteeism	60	52	
Medication	35	42	
Insomnia	71	71	
Physical Injury	23	25	
Professional Care/Treatment	42	39	

#### KEY FINDINGS FOR LONG-TERM CARE NURSES (N=483)

This section examines the subset of nurse respondents who reported themselves as actively working and their nursing sector as long-term care (13% of the entire sample). A number of key findings from the new COVID-19-related questions for this sector are shown in Table 8. The comparison of key findings remeasured between the two surveys is shown in Table 9, as well as findings from conceptually relevant items added in the follow-up survey.

Table 8. Follow-up survey key findings for long-term care nurse respondents

Finding	Follow-up % (N=483)
COVID-19 within the workplace	•
Weekly or more frequent direct contact with COVID-19 patients	14
Told to work despite possible or confirmed exposure to COVID-19	22
Experienced symptoms similar to COVID-19	29
Tested for COVID-19	27
Somewhat to extremely concerned about contracting COVID-19 at work	80
Somewhat to extremely concerned about bringing COVID-19 home	87
Inadequate staffing	63
Inadequate/no training to work safely with COVID	37
Disagree that PPE is high quality	50
Disagree that there is sufficient PPE access to perform work safely	43
Time since last N95 fit test $\geq 2$ years or never	40
Not confident in organizational handling of pandemic	26
Not confident in manager's handling of pandemic	30
Not supported by organization during COVID	19
Daily or multiple times a day changes to COVID-19 related protocols and policies	18
Transparency on organizational pandemic decisions rated as poor or failing	39
Relationships with colleagues worsened during COVID-19 pandemic	27
Relationships with manager worsened	35
Relationships with rest of team worsened	29

<u>Areas of worsening</u> included more respondents reporting higher levels of poor mental health (anxiety, depression, and emotional exhaustion); lower quality of general and last shift nursing care; and less respondents who would recommend their workplace to friends for care. Respondents' perception of employer measures to prevent workplace violence worsened. The prevalence of medication, insomnia, and physical injury as a result of exposure to workplace violence also increased.

<u>Areas of improvement</u> included a decrease in the proportion of nurses with high depersonalization. There was also reduction in prevalence of workplace violence, and of absenteeism and presenteeism as a result of exposure to workplace violence.

Table 9. Key findings on psychological health and safety and quality and safe care provision among long-term care nurses who responded to the follow up survey and their peers who responded to the baseline survey (when applicable)

Finding	Original % (N=446)	Follow-up % (N=483)
Nurse outcomes		/
Meets or exceeds cutoff for PTSD measure	42	41
Moderate to severe anxiety	26	32
Moderate to severe depression	32	36
High emotional exhaustion	54	57
High depersonalization	26	21
Low personal accomplishment	34	35
Suicide and suicidal ideation		
Lifetime		
Has thought about committing suicide		26
Has made plans for committing suicide		11
Has attempted suicide		4
Past 12 months		1
Has thought about committing suicide		7
Has made plans for committing suicide		3
Has attempted suicide		1
Alcohol and substance use (over the past six months)		1
Drinks alcohol once a week or more		34
Smokes once a week or more		15
Used illegal substances in the past six months		1
Psychological safety at work		
Experienced discrimination	26	27
Experienced bullying or harassment	17	16
Experienced unfair treatment due to mental illness	3	2
Quality and safety of care	1	•
Poor or fair general quality of nursing care	12	20
Poor or fair quality of nursing care last shift	14	18
Failing or poor rating of patient safety	17	16
Would not recommend to friends for care	29	31
Would not recommend to colleagues for work	33	32
Quality, safety, and workload		
Patient incidents involving respondent (% for responses noting	'monthly'	
frequency or higher)		
Complaints from patients and/or their families		56
Urinary tract infection		44
Patient falls with injury		41
Nursing tasks necessary but left undone last shift (% for 'Yes'	responses)	
Comfort/talk with patients		51
Develop or update nursing care plans/pathways		49
Adequately document nursing care		31
Non-nursing tasks performed last shift (% for 'Yes' responses)		
Clerical duties		69
Obtaining supplies and equipment		51

Housekeeping duties		50
Prevalence of various types of workplace violence (% who reported some level of experience)		
Physical assault	85	74
Threat of assault	85	81
Emotional abuse	84	80
Verbal sexual harassment	56	48
Sexual assault	17	11
Witnessed workplace violence without being involved (% who responded yes)		
Witnessed workplace violence	78	70
Employer measures taken to prevent workplace violence		
Not at all/Slight	39	47
Experiences as a result of exposure to workplace violence		
Absenteeism	45	37
Presenteeism	62	53
Medication	40	45
Insomnia	67	72
Physical Injury	38	42
Professional Care/Treatment	39	40