

The Mosaic of Primary Care Nurses in Rural and Remote Canada: Results from a National Survey

Mosaïque de la main-d'œuvre infirmière en soins primaires dans les régions canadiennes rurales et éloignées : résultats d'une enquête nationale

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TABLE 1. Demographics of nurses in rural and remote primary care

Demographics	Group A N = 192 n (%)	Group B N = 111 n (%)	χ^2 p-value	p-value by category
Nurse type				
Nurse practitioner	85 (44.3)	24 (21.6)	<0.001	<0.001
Registered nurse	74 (38.5)	81 (73.0)		<0.001
Licensed practical nurse	33 (17.2)	6 (5.4)		0.003
Gender				
Male	10 (5.4)	8 (7.5)	0.458	
Female	176 (94.6)	98 (92.5)		
Age				
<30	13 (7.1)	9 (8.4)	0.009	0.697
30–34	10 (5.5)	18 (16.8)		0.002
35–39	15 (8.2)	9 (8.4)		0.960
40–44	29 (15.9)	11 (10.3)		0.180
45–49	23 (12.6)	11 (10.3)		0.549
50–54	37 (20.3)	15 (14.0)		0.177
55–59	36 (19.8)	13 (12.1)		0.095
60 and older	19 (10.4)	21 (19.6)		0.029
Highest nursing education credential				
Diploma	69 (37.1)	34 (30.9)	<0.001	0.280
Bachelor's	57 (30.6)	59 (53.6)		<0.001
Masters/doctorate	60 (32.3)	17 (15.5)		0.001

Demographics	Group A N = 192 n (%)	Group B N = 111 n (%)	χ^2 p-value	p-value by category
Region of residence				
Atlantic	51 (26.6)	8 (7.2)	<0.001	<0.001
Quebec	14 (7.3)	7 (6.3)		0.741
Ontario	39 (20.3)	8 (7.2)		0.002
Territories	40 (20.8)	68 (61.3)		<0.001
Manitoba/Saskatchewan	27 (14.1)	11 (9.9)		0.294
Alberta/British Columbia	21 (10.9)	9 (8.1)		0.430
Primary position				
Manager	11 (5.7)	11 (9.9)	<0.001	0.177
Staff nurse	85 (44.3)	74 (66.7)		<0.001
Nurse practitioner	84 (43.8)	21 (18.9)		<0.001
Clinical nurse specialist	12 (6.3)	5 (4.5)		0.522

Group A includes nurses whose area of practice was PC-Only and Group B includes nurses whose area of practice was PC-Plus.

Note: Unless otherwise noted, responses are presented as percentages of total responses and exclude missing cases. Z-test was used to compare two proportions. Bolded values are significant at $p < 0.05$.

TABLE 2. Nurses' place of employment characteristics

Demographics	Group A N = 192 n (%)	Group B N = 111 n (%)	χ^2 p-value	p-value by category
Population of primary work community				
<1,000	42 (22.8)	47 (43.9)	<0.001	<0.001
1,000–2,499	38 (20.7)	33 (30.8)		0.051
2,500–4,999	25 (13.6)	11 (10.3)		0.407
5,000–9,999	41 (22.3)	8 (7.5)		0.001
≥10,000	38 (20.7)	8 (7.5)		0.003
Distance from advanced referral centre				
0–99 km	36 (18.9)	9 (8.3)	<0.001	0.014
100–199 km	37 (19.5)	5 (4.6)		<0.001
200–499 km	57 (30.0)	15 (13.9)		0.002
500–999 km	19 (10.0)	13 (12.0)		0.582
≥1,000 km	41 (21.6)	66 (61.1)		<0.001
Required to be on call				
Yes	48 (25.7)	79 (73.1)	<0.001	<0.001
No	139 (74.3)	29 (26.9)		<0.001

Group A includes nurses whose area of practice was PC-Only and Group B includes nurses whose area of practice was PC-Plus.

Note: Unless otherwise noted, responses are presented as percentages of total responses and exclude missing cases. Z-test was used to compare two proportions. Bolded values are significant at $p < 0.05$.

TABLE 3. Nurses' perceptions of workplace engagement in primary healthcare delivery and job-related resources and demands

Variable	Total M (SD)	Group A M (SD)	Group B M (SD)	p-value	Partial η^2
PHCE	(N = 240)	(N = 144)	(N = 96)		
Summated scale	101.69 (12.45)	99.78 (12.29)	104.6 (12.20)	0.003	0.035
Accessibility/Availability	3.82 (1.04)	3.43 (1.02)	4.39 (0.79)	<0.001	0.204
Patient-Centred Care	4.29 (0.63)	4.30 (0.63)	4.28 (0.63)	0.794	0.000
Continuity	3.84 (0.61)	3.82 (0.62)	3.86 (0.60)	0.596	0.001
Population-Orientation	3.40 (0.71)	3.28 (0.67)	3.58 (0.72)	0.001	0.044
Community Participation	3.35 (0.80)	3.38 (0.83)	3.32 (0.75)	0.564	0.001
Intersectoral Team	3.13 (0.79)	3.09 (0.78)	3.20 (0.81)	0.290	0.005
Interdisciplinary Collaboration	3.97 (0.73)	3.97 (0.76)	3.98 (0.69)	0.905	0.000
Quality Improvement	3.15 (0.98)	3.26 (0.97)	2.98 (0.97)	0.034	0.019
JRIN	(N = 268)	(N = 170)	(N = 98)		
Summated Scale	82.75 (12.78)	85.24 (12.37)	78.44 (12.38)	<0.001	0.066
Supervision, Recognition and Feedback	3.38 (0.96)	3.48 (0.88)	3.20 (1.07)	0.023	0.019
Collegial Support	4.06 (0.63)	4.08 (0.63)	4.02 (0.64)	0.448	0.002
Staffing and Time	3.02 (0.91)	3.17 (0.87)	2.75 (0.93)	<0.001	0.050
Technology	3.35 (0.91)	3.50 (0.90)	3.08 (0.87)	<0.001	0.050
Training, Professional Development, Continuing Education	3.15 (0.91)	3.29 (0.89)	2.93 (0.89)	0.002	0.037
Autonomy and Control	3.73 (0.73)	3.79 (0.74)	3.63 (0.72)	0.092	0.011
JDIN	(N = 227)	(N = 139)	N		
Summated Scale	51.75 (10.91)	50.47 (10.42)	53.77 (11.40)	0.026	0.022
Work-Related Travel	2.64 (1.02)	2.56 (1.03)	2.77 (0.99)	0.126	0.010
Preparedness/Scope of Practice	2.47 (0.42)	2.48 (0.42)	2.45 (0.41)	0.660	0.001

Variable	Total M (SD)	Group A M (SD)	Group B M (SD)	p-value	Partial η^2
Equipment and Supplies	2.47 (0.84)	2.32 (0.80)	2.70 (0.87)	0.001	0.048
Isolation	2.34 (0.76)	2.34 (0.80)	2.34 (0.68)	0.992	0.000
Comfort with Working Conditions	2.82 (0.71)	2.75 (0.65)	2.93 (0.79)	0.061	0.015
Safety	2.46 (0.91)	2.35 (0.86)	2.64 (0.95)	0.015	0.026

Group A includes nurses whose area of practice was PC-Only and Group B includes nurses whose area of practice was PC-Plus.

Note: Multivariate analyses of variance analysis was performed for each scale and the corresponding subscales.

Wilk's criterion (λ) was used for the F-test statistic of the multivariate analyses of variance between groups (PC-Only vs. PC-Plus) on the Primary Health Care Engagement (PHCE), Job Resources in Nursing (JRIN) and Job Demands in Nursing (JDIN) scales and subscales. The total summated scores ranged from 60 to 117 for nurse practitioners, 51 to 112 for registered nurses and 44 to 114 for licensed practical nurses for the JRIN. The total summated scores ranged from 23 to 73 for nurse practitioners, 29 to 85 for registered nurses, and 29 to 66 for licensed practical nurses for the JDIN. Changing "n" is due to missing data. Bolded values are significant at $p < 0.05$.