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Exploring Prevalence and Implications of Burnout Among Nurse Practitioners in Canada

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Abstract

Aims and Scope: Nurse Practitioners are experiencing unprecedented levels of burnout exacerbated by factors unique to this professional group. Additional factors include undervalued professional worth, lack of autonomy, and organizational and systems pressures. This study was conducted to explore NP Burnout in Canada. **Methods:** The NP Burnout Survey, designed to capture the unique factors impacting NP burnout, was delivered to 229 NPs across Canada. Responses underwent descriptive and binomial logistic regression analysis. **Findings:** More than one third of NPs are experiencing high levels of burnout. NPs with high burnout are 17 times more likely to leave their position and 66 times more likely to leave the profession. **Conclusion:** Urgent attention and viable solutions are required to mitigate NP's exodus from the profession. Addressing the issues impacting NP burnout will ensure that this profession will meet their full potential in Canada's healthcare system.

Keywords: Nurse practitioners, NPs, burnout, intention to leave, practice autonomy

Introduction

The World Health Organization defines burnout as an 'occupational phenomenon.' It's not a diagnosis, rather it's been classified as a syndrome, directly related to one's occupation. Symptoms of burnout include exhaustion, mental distancing from one's job, feeling negative or cynical

about one's job, and reduced professional efficacy (World Health Organization, 2019). Some common factors among professions that lead to burnout include higher demands, lower resources, lower adaptive organizational attitudes, and female gender (Tanya Schlemmer, 2020; West et al., 2018).

Nurse Practitioners (NPs) are regulated across all jurisdictions in Canada and hold significant potential to enhance the healthcare system. NPs have the authority to order diagnostic tests, diagnose and prescribe from the full compendium of pharmaceuticals (Canadian Nurses Association, n.d.) With their broad scope of practice, they are equipped to deliver comprehensive care in various settings, presenting a promising solution to the shortage of primary healthcare providers nationwide. However, many NPs report challenges in fully utilizing their practice potential (Heale, 2021) and experience burnout due to the demands of the current practice environment.

A recent study involving 23 NPs across Canada, conducted through four focus groups, validated this assumption. The findings identified distinct challenges contributing to NP burnout, categorized into three main themes: undervalued professional worth, lack of autonomy, and organizational and systemic pressures (XXXX, unpublished). These issues manifest in various ways. The only option for employment for most NPs are government-appointed positions which are characterized by stagnant and inadequately adjusted remuneration, and limited autonomy within physician-led models and other organizations. Additionally, NPs continuously strive for recognition within the healthcare system and among the general public (Heale, 2021). There is often an ongoing need to justify the NP role despite decades of practice, micromanagement that restricts even simple decisions like appointment scheduling, and inequities in remuneration policies. Together, these challenges lead to frustration and exhaustion, exacerbated by a relentless struggle against entrenched systemic barriers.

A few examples help to provide context to the NP experience. In the province of Ontario, Bill 124 capped public sector wages, including those of NPs, and although repealed and other public sector worker's salaries increased, there has been no increase in public sector NP funding for years (Jones, 2024). Frustrated by these conditions and the lack of healthcare access, many NPs have turned to private-pay clinics. Instead of collaborating with NPs to create fair remuneration systems, governments have subjected them to intense scrutiny and criticism and NPs have often had to endure attacks by the media and some professional nursing organizations (MacMillan, 2024).

In another example, a private member's bill was proposed in Ontario that specifically targeted NPs, aiming to prevent them from charging for care

covered by public health insurance (Bill 203, Keeping Primary Care Fair Act (Restricting Private Payments for Nurse Practitioner Services), 2024, n.d.). It is not illegal for NPs to open private pay clinics, yet this legislation singled out NPs while overlooking other providers, such as physicians, who charge patients even when they alone have the option of billing provincial health plans.

Failing to address NP burnout has serious consequences. Job satisfaction among NPs is low, and the intention to leave the profession remains high (Bourdeanu et al., 2020; Faraz, 2017; Hagan & Curtis, 2018). NPs perceive their care to be a lower quality when they experience burnout (Abraham et al., 2021). The factors contributing to NP burnout directly affect their ability to perform at an optimal level, diminishing their capacity to deliver effective healthcare (Heale, 2021).

This study aimed to assess the extent, and particularly the consequences of NP burnout in Canada. The survey offered not only an overview of NP burnout but also underscores the key issues affecting NPs, identifying areas of focus that could help reduce burnout, empower NPs, and improve healthcare delivery.

Methods

Survey Tool Development

The NP Burnout Survey tool was developed, and a pilot test was conducted. Some development details are listed here, but the complete development process and full psychometric evaluation will be published elsewhere. This article focuses on the NP Burnout Survey, the findings, and their implications.

The NP Burnout Survey was developed using a construct-centered approach (Nemoto & Beglar, 2013). This process ensured that each item was based on a detailed understanding of the construct and designed to measure a specific aspect of it. (Nemoto & Beglar, 2013). A comprehensive review of the construct was ascertained through a two-phase process including a thorough literature review and four focus groups with NPs (n= 23) (Roff et al., 2005).

Items were formatted as Likert scale questions, allowing participants to respond along a continuum. This approach enabled more authentic responses compared to binary or fixed-choice options. Each item in a Likert scale survey should measure one idea of the construct (Nemoto & Beglar, 2013). NP burnout is a complex construct that is influenced by a variety of elements including internal (depression, preparedness for practice, overwhelmed, etc.); occupational (administration, teamwork, workload, etc.); and external (perception of NP role, regulation, health policy, etc.) each of which impacts outcomes (undervalued professional worth, lack of autonomy,

organizational & systems pressures, job satisfaction, intent to leave, family and social disruption, etc.). The result was 79 items. Although some common issues emerged, many essential items did not fit specifically into specific categories. Subsequently, a decision was made not to categorize the items, or to calculate a score.

The NP Burnout Survey was distributed to NPs across Canada through NP Associations, NP professional groups (NP Central), and social media. Interested parties were directed to the Nurse Practitioner Global Initiatives website where a description of the research was posted along with a button that brought those interested to the survey tool. All phases of the NP Burnout research study including focus groups, survey development, and distribution were approved by XXXXX Research Ethics Board #XXXXXX.

The NP Burnout Survey was completed by 229 NPs from March to May 2024. The development process (literature review and focus groups) helped to achieve construct validity of the items, while content and face validity were confirmed through participant feedback to the pilot test of the survey (Heale & Twycross, 2015). Cronbach's alpha coefficient = 0.812 indicated a high level of internal consistency for this survey. The item-total statistics reveal that Cronbach's alpha remains above 0.8 even if any item is deleted, suggesting that each item in the NP Burnout Survey contributes strongly, is appropriate, and that no question likely needs to be removed (Laerd Statistics, 2018).

Analysis

Data were added to SPSS 29. Reverse-scored Likert questions were re-coded. Missing data were imputed into each incomplete variable representing up to 17% of total cases (Madley-Dowd et al., 2019). Descriptive statistics were analyzed to provide an overview of the characteristics of the participants.

Analysis was completed to determine the likelihood of, and the extent to which, a variable contributed to NP burnout. A model for binomial regression analysis was constructed. The variable 'To what extent do you feel burned out in your NP role' was recoded into a dichotomous variable with 'not at all'; 'slightly' and 'moderately' coded as 1= low (n=149) to moderate burnout and 'very much' and 'extremely' to 2= high burnout (n=80).

In order to focus on the contribution of organizational, or systems items to NP burnout, variables related to the personal outcome of burnout on an individual's mental health, or the personal lives of participants were removed from the model. Correlations explored associations between the remaining items and the new dichotomous burnout variable. Survey items that were not significant were removed from the regression analysis along

with demographic items age, time as a NP, type of NP license and highest level of educational, which were not significant. Using this process a total 24 items were not included in the regression model.

The fittingness of the model was demonstrated through The Omnibus test of model coefficients, the overall fit of the model, was statistically significant ($p=<0.001$). Hosmer and Lemeshow Test goodness of fit test was not significant ($p=0.10$), suggesting that the model is a good fit, and the Nagelkerke R Square value explains >80% of the variation in the model (Laerd Statistics, 2018).

Results

The Mean age of participants was 46.45. Minimum age was 27 and maximum 70; The range of age was 43 years. The mean time in practice as a NP was 12.15 years with a range of 50 years. Additional characteristics of the sample are presented in Table 1.

Table 1: Participant Characteristics

Province/Territory	**Frequency**	**Percentage**
Newfoundland	4	1.7
Prince Edward Island	1	.4
New Brunswick	6	2.6
Nova Scotia	13	5.7
Quebec	2	.9
Ontario	183	79.9
Alberta	8	3.5
Saskatchewan	1	.4
British Columbia	3	1.3
North West Territories	1	.4
Total	222	96.9
Missing	7	3.1
License		
Primary health care/Family All Ages	199	86.9
Adult	22	9.6
Pediatric	3	1.3
Total	224	97.8
Missing	5	2.2
Education Level		
Baccalaureate	3	1.3
Post Baccalaureate Certificate	14	6.1
Graduate Certificate	10	4.4
Masters	179	78.2
Doctoral (PhD or DNP)	17	7.4
Total	223	97.4
Missing	6	2.6
Extent of Burnout		
not at all	12	12

Slightly	37	37
Moderately	61	61
Very Much	48	48
Extremely	32	32
Total	190	83
Missing	39	17

Using the dichotomous variable for NP burnout, chi square tests of association were used to analyze the level of burnout related to the clinical practice site. None of the sites was significantly associated with high NP burnout except for NPs who worked in nurse practitioner-led clinics: $\chi^2(1) = 8.079$, *p =0.005*.

The binomial regression analysis presented in Table 2 highlights several significant associations with nurse practitioner (NP) burnout. Notably, items with statistically significant odds ratios less than 1 are italicized and won't be discussed in this article. However, items with particularly strong associations are bolded for emphasis.

Table 2: NP Burnout Survey Regression Analysis

						I C.I. 95% for Odds	
To what extent …	B	S.E.	Wald	p	Odds	Lower	Upper
do you think other NPs in your organization, or colleagues are burnt out?	**3.588**	**1.623**	**4.887**	**.027**	**36.152**	**1.502**	**870.058**
do you find your practice meaningful?	1.934	1.009	3.674	.055	6.916	.957	49.970
are you micromanaged in your current workplace?	-1.472	.915	2.591	.107	.229	.038	1.378
are the treatment plans you develop for your patients altered by other providers or because of administrative policies?	-1.937	1.186	2.669	.102	.144	.014	1.472
would you have chosen an NP position in a different setting, model, or organization, had it been available to you?	*-1.589*	*.745*	*4.546*	*.033*	*.204*	*.047*	*.880*
has as an NP student or a practicing not at all NP, has a strong and powerful NP role been modeled?	*-4.184*	*1.559*	*7.200*	*.007*	*.015*	*.001*	*.324*
do you feel like an equal to physicians not at all in your practice setting?	1.409	.797	3.123	.077	4.093	.858	19.540
do you practice in isolation?	.246	.704	.123	.726	1.279	.322	5.080
does your practice extend beyond care for medical conditions, into addressing patient's social	1.382	.844	2.680	.102	3.984	.761	20.844

determinants of health?							
would you classify your patient not at all population as vulnerable and/ or complex?	1.529	1.049	2.126	.145	4.615	.591	36.052
are you intending to leave your current not at all job?	**2.834**	**1.103**	**6.600**	**.010**	**17.009**	**1.958**	**147.770**
are you interested in finding employment outside of the NP role?	**4.195**	**1.578**	**7.064**	**.008**	**66.340**	**3.008**	**1462.912**
would you find an NP position in a healthcare sector other than the one you are currently working in?	-1.092	.695	2.471	.116	.336	.086	1.310
is the purpose of your practice to fill gaps in physician practices?	.937	.783	1.433	.231	2.553	.550	11.843
Is remuneration a factor in your level of burnout?	-1.578	1.052	2.247	.134	.206	.026	1.624
are you able to determine numbers of not at all patients in your practice?	*-2.415*	*.926*	*6.804*	*.009*	*.089*	*.015*	*.549*
are you able to determine the addition of new patients to your workload?	-.498	.745	.448	.503	.608	.141	2.615
do the members of your team (physicians, administration, other) know, or understand your role (scope of practice)?	**4.147**	**1.805**	**5.282**	**.022**	**63.264**	**1.841**	**2173.622**
are the members of your team (physicians, other health care providers, administration) supportive of your role?	*-6.799*	*2.121*	*10.274*	*.001*	*.001*	*.000*	*.071*
does ambiguity of your role contribute not at all to your level of burnout?	1.201	.914	1.724	.189	3.322	.553	19.942
are you able to flex your time in your position?	-1.602	1.005	2.541	.111	.202	.028	1.445
does your organization support and endorse self-care to prevent burnout and address mental health concerns?	**1.468**	**.716**	**4.198**	**.040**	**4.339**	**1.066**	**17.669**
do you think the health issues of patients you see are beyond your personal professional capacity to manage?	1.353	.969	1.951	.163	3.870	.579	25.845
do you worry about making a mistake in a treatment plan that harms a patient?	.168	.737	.052	.819	1.183	.279	5.020
do you feel 'decision fatigue' (the feeling of not wanting to solve any more patient problems)?	.730	.743	.964	.326	2.074	.483	8.900

do you feel 'compassion fatigue' (inability to continue to feel an emotional connection to patients)?	-1.136	.776	2.141	.143	.321	.070	1.470
you feel that your education program prepared you to practice in your current NP position?	*-3.597*	*1.553*	*5.367*	*.021*	*.027*	*.001*	*.575*
does your NP position require knowledge and skills that were not part of your NP education program?	1.940	1.135	2.919	.088	6.957	.752	64.405
did you in the past, or do you now, none at all receive mentorship?	-1.796	1.000	3.222	.073	.166	.023	1.179
are you expected to take on additional responsibility such things as 'on call', reception, or administrative issues such as policy development?	**1.597**	**.670**	**5.679**	**.017**	**4.939**	**1.328**	**18.372**
are you able to collaborate with other not at all providers for the care of your patients (including slightly physicians, social workers, physiotherapists etc.)?	*-2.648*	*1.140*	*5.397*	*.020*	*.071*	*.008*	*.661*
does regulation impact your level of burnout (e.g. scope of practice regulation, laws related to remuneration etc.)?	-1.425	1.018	1.960	.161	.241	.033	1.768
society's view, or understanding of the NP role impact your level of burnout?	*-2.704*	*1.372*	*3.886*	*.049*	*.067*	*.005*	*.985*
you feel 'heard' when you bring up issues in your workplace?	-.874	.898	.947	.330	.417	.072	2.426
do you feel respected in your not at all workplace?	-.793	1.158	.469	.494	.452	.047	4.381
do you feel respected by your professional organizations?	*6.821*	*2.542*	*7.200*	*.007*	*916.768*	*6.287*	*133681.83*
Do you feel respected by not at all regulators/government?	-1.130	1.086	1.081	.298	.323	.038	2.717
do you feel demoralized in your NP practice?	1.681	1.381	1.481	.224	5.369	.359	80.398
is critique, or feedback in your workplace directed to you personally and not related to NP practice?	.381	.704	.293	.588	1.464	.368	5.819
do you think the 'constant systems fight' (for recognition, regulation, pay etc.) contributes to your level of burnout?	1.604	.856	3.511	.061	4.972	.929	26.615
do strategies and lobbying by	*-2.039*	*.925*	*4.864*	*.027*	*.130*	*.021*	*.797*

physician groups for better benefits for themselves influence your level of burnout?							
do you feel exploited in your NP role?	1.089	.813	1.791	.181	2.970	.603	14.626
are you expected to shoulder the full clinic load while physician colleagues work elsewhere?	.847	.678	1.560	.212	2.333	.617	8.812
do you feel confident in your practice?	.991	1.388	.510	.475	2.693	.177	40.879
do you feel motivated in your practice?	*-3.596*	*1.322*	*7.396*	*.007*	*.027*	*.002*	*.366*
are you able to complete patient documentation?	.295	.709	.173	.677	1.343	.335	5.387
are you expected to complete unfinished work at home?	.268	.651	.169	.681	1.307	.365	4.680
do you stay late to complete unfinished work?	**3.012**	**1.320**	**5.208**	**.022**	**20.34**	**1.530**	**270.25**
do you experience moral injury in your workplace (distress as a response to acting or rarely witnessing behaviors that go against your values and moral beliefs)	*-2.813*	*1.338*	*4.420*	*.036*	*.060*	*.004*	*.827*
do you think the expectations for the NPs in your workplace unrealistic?	.316	.781	.164	.686	1.372	.297	6.346
do you have enough resources to adequately provide care in your practice?	1.054	.738	2.043	.153	2.870	.676	12.185
are you expected to complete statistics, or reports to demonstrate the value of your position?	-.710	.660	1.158	.282	.492	.135	1.792
is the funding for your position precarious?	.433	.734	.347	.556	1.541	.366	6.497
are you able to provide holistic care?	-.039	1.032	.001	.970	.962	.127	7.269
are you able to take part in continuing education opportunities?	*-2.925*	*1.523*	*3.688*	*.055*	*.054*	*.003*	*1.062*
do you feel that NPs are in competition with physicians in the healthcare system?	-1.563	.902	3.003	.083	.210	.036	1.227

df= 1

These findings include the following: NPs who perceive their colleagues as experiencing burnout are 36 times more likely to report burnout themselves ($p = 0.03$). NPs who are experiencing high levels of

burnout are 17 times more likely to intend to leave their role (*p =0.01*), and 66 times more likely to consider employment outside the NP profession (*p = 0.01*). Burned-out NPs have 63 times higher odds of reporting that their team understands their scope of practice (*p = 0.02*) and are 4 times more likely to work in organizations that promote self-care and mental health initiatives to address burnout (*p = 0.04*). NPs who frequently stay late to complete unfinished work are 20 times more likely to experience burnout (*p = 0.02*). Additionally, those expected to take on non-clinical responsibilities, such as being on call, handling reception duties, or engaging in administrative tasks like policy development, have 4 times higher odds of reporting burnout (*p = 0.02*).

Discussion

The findings are deeply troubling, that burnout among NPs is widespread and has profound implications. While it is well-documented that burnout contributes to high turnover intentions among NPs, the staggering likelihood of leaving their current position and, particularly leaving the profession altogether, is alarming. NPs hold immense potential in addressing healthcare challenges such as shortages in primary care providers, and to significantly improve health system outcomes. Yet, despite this potential, the conditions leading to such severe burnout have been allowed to persist.

Some findings provide context for this phenomenon. For instance, when NPs report that their teams understand their scope of practice, it suggests they are practicing to the full extent of their knowledge and skill. It is anticipated that NPs in NPLCs will work to their full regulated scope. While this is ideal in theory, in practice, it often results in increased clinical burdens without adequate support or resources. Even organizations that offer self-care initiatives may fall short when the expectations for NPs are excessive as evidenced by such things as the need to stay late to complete charting. Although working to the full scope of practice is associated with reduced burnout, achieving this requires autonomy over one's practice (Athey et al., 2016). Even with the added responsibilities and burdens of solo practice, the ability to make independent practice decisions results in less burnout in this model (Edwards et al., 2018).

Combined with the persistent systemic struggles for recognition, equitable pay, and practice autonomy, burnout is compounded by added responsibilities and liability without appropriate authority, leading to an ongoing fight for fairness (XXXX, unpublished). Addressing systemic inequities remains a monumental challenge.

Finding Solutions

There is an urgency to addressing burnout in NPs to mitigate an exodus of these professionals from the healthcare landscape and to ensure they can work to their full potential. Clinical issues such as micromanaging details of NP practice appear to arise from current organizational structures. Addressing the systemic barriers to NP practice has the potential to change the dynamic within clinical settings and reduce NP burnout. These include such things as legislative changes which advocate for equitable remuneration policies, including revising public sector wage freezes or caps and ensuring NPs receive fair compensation for their work (Nelson, n.d.). In addition, the reform of regulations to grant NPs greater autonomy in decision-making and practice decisions (Athey et al, 2016). This would require the allocation of sufficient funding to ensure NPs have access to necessary tools, staff, and infrastructure for efficient practice (Brom et al, 2016; Chen & Lin, 2022).

A vital, but more difficult changes are in promoting awareness of the NP role to increase recognition of their contributions to healthcare. This should be tied to the development and implementation of policies that encourage effective interprofessional collaboration and respect for all roles within the healthcare system (Nelson, n.d.). Finally, an invest in ongoing research to monitor NP burnout rates and develop evidence-based interventions tailored to their needs would demonstrate commitment to addressing the needs of NPs.

Limitations

This study has limitations that should be considered when interpreting the findings and their implications for addressing burnout in the NP workforce. The survey was delivered to 229 NPs across Canada, which, while valuable, may not be fully representative of the broader NP population and reduces the generalizability of the findings to the national NP workforce. The voluntary nature of the survey may have introduced response bias, as individuals experiencing higher levels of burnout may have been more motivated to participate, potentially skewing the results toward more severe outcomes. The majority of respondents were from one province. Disproportionate regional representation could limit the applicability of the findings to specific provinces or territories. The cross-sectional nature of the survey provides a snapshot of burnout levels at a single point in time, limiting the ability to infer causality or evaluate temporal trends in burnout among NPs. The study does not address contextual variables, such as healthcare system differences, patient demographics, or broader societal stressors like the COVID-19 pandemic, which may have influenced burnout levels. Finally, the reliance on self-reported measures of burnout and

intentions to leave the profession introduces subjectivity, as responses may be influenced by personal perception and recall bias.

Conclusions

Nurse Practitioners (NPs), like other healthcare professionals in Canada and across the world, are experiencing unprecedented levels of burnout (Nelson, n.d.). Unlike other health professionals, the factors influencing NPs include issues of professional recognition, value, and autonomy over their practice. Systemic barriers, coupled with a lack of meaningful support, exacerbate burnout and drive many NPs to consider leaving their roles, or the profession entirely. A one-size-fits-all approach to strategies for reducing burnout will not have a significant impact on NPs. These professionals, their employers, regulators, and the public must be made aware of the challenges faced by NPs to ensure that the issues are appropriately addressed to provide optimal healthcare.

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Data Availability: All data are included in the content of the paper.

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Declaration for Human Participants: This study received ethical approval 6024116 from the research ethics board of Laurentian University-CA, and the principles of the Helsinki Declaration were followed.

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