Contributors to Physician Burnout and Well-Being in Forensic Psychiatrists in Canada

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The experience of burnout in forensic psychiatrists has not been well studied, with most studies focusing on the experiences of forensic nurses, the impact of vicarious trauma and compassion fatigue in forensic mental health professionals, and the risk of posttraumatic stress disorder related to workplace exposures. This study reports on a national survey (34% response rate) conducted with forensic psychiatrists across Canada to understand the rate of, and contributors to, burnout and professional fulfillment. Just over half of the physician respondents reported experiencing burnout, which is in line with other recent surveys in Canada that have indicated elevated levels of burnout since the onset of the pandemic. The highest rates were found among early-career psychiatrists and those whose values did not align with their workplace. Intellectual stimulation, the interface with the legal system, and flexibility in one's job were all strongly linked with professional fulfillment. The goal of this survey was not only to identify rates and variables affecting burnout and wellness in this population but also to expand the dialogue on potential interventions at institutional and systems levels that can reduce burnout, promote professional fulfillment, and enhance recruitment and retention in the field of forensic psychiatry.

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Physician burnout is defined as a syndrome of emotional exhaustion, depersonalization, and sense of reduced personal accomplishment related to prolonged exposure to work-related stress.[1] Momentum to address physician burnout has been building for many years because of the high prevalence and adverse consequences of burnout, including a decline in quality of patient care and job satisfaction, engagement in unprofessional behavior, increased physician turnover, substance use, and depression.[2–6]

The literature related to physician burnout has evolved. Initially, the focus was on developing a conceptual framework for, and identifying contributors to, burnout.[7–8] This focus was followed by an emphasis on individual and institutional interventions,[9–10] and most recently by a focus on the importance of physician well-being to health care delivery systems and the profound impact that work has on individual wellness.[11] This most recent phase has been characterized by system-based interventions to address the root causes of occupational distress and has considered additional external variables, such as the impact of the pandemic.[12–13] This evolution has also led to the consideration of not only factors that increase burnout but also those factors that promote physician wellness.

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Interestingly, defining the concept of physician wellness has proved elusive. According to a systematic review, there was a lack of conceptual clarity regarding the definition of physician wellness, with 86 percent of the papers reviewed not providing a definition of the concept at all.[14]

The prevalence of physician burnout has been increasing over time and in the context of the pandemic. The Canadian Medical Association (CMA) conducted a survey in November 2021, in which 53 percent of physician and medical learners reported experiencing high levels of burnout, in contrast to a similar survey published in 2017 that reported a burnout rate of 30 percent.[15] Similarly, the Ontario Medical Association (OMA) conducted two surveys one year apart, with the second survey in March 2021 indicating 34.6 percent of respondents reported high levels of burnout, with rates having increased since March 2020.[16] There are reported differences in the prevalence of physician burnout within medical specialties, with front-line physicians, women, and younger physicians reporting more symptoms of burnout.[4,17,18] Psychiatrists may be at higher risk to experience burnout, although the relative contribution of various factors remains unclear.[19]

There has been little study of forensic psychiatrists and the experience of burnout, with most studies of forensic mental health professionals focusing on the experience of forensic psychiatric nurses. Psychiatric nurses have been found in some studies to have a higher risk of burnout than other nursing professions.[20] In at least one study, physical aggression experienced by forensic nursing staff increases the risk of developing burnout symptoms.[21] Other studies have not found higher rates of burnout among forensic nurses.[22–24] In some samples, forensic nurses recorded higher levels of satisfaction than their nonforensic nursing colleagues, noting their involvement in decision-making and the supportiveness of their work environment, factors that may balance the demands of the job.[22,25] Similarly, a cross-sectional health needs assessment of forensic mental health staff ($n = 170$), conducted in the National Health Service in the UK between 2017 and 2018, found relatively low burnout rates and modest job and life satisfaction, contrary to what was expected.[26] It was noted that there was a relatively high rate of job turnover, which may have reflected that the most burned-out staff had already left the service.

The existing literature regarding the impact of forensic work on the psychological well-being of psychiatrists is predominantly in the realms of vicarious trauma (VT), compassion fatigue (CF), and posttraumatic stress disorder (PTSD).[27,28] VT can develop in the context of exposure to the retelling of a traumatic event and manifest as characteristic symptoms, akin to direct exposure to the trauma as seen in PTSD. CF develops via the process of empathizing with the pain and suffering of the other without direct or indirect trauma exposure.[28] Burnout is differentiated from these concepts as arising from workplace stress other than that which is the result of exposure to trauma or the distress of others. Therefore, the conceptual differences between these problems may be useful, in a forensic context, to improve awareness and identify more specific risk factors and interventions. The nature of the work of forensic practitioners can lead to VT and CF, given the facts, images, reports, and encounters with individuals who are more likely to have trauma histories and significant psychopathology. A 2021 study examined 633 front-line clinicians on an inpatient unit (68% nursing staff, 57% on a forensic unit) and found that forensic staff reported more direct exposure to a variety of potentially traumatic events and chronic stressors, with 22 percent of forensic staff meeting the screening cutoff for PTSD (as opposed to 11% of nonforensic staff).[29] Forensic staff also reported a greater degree of incongruence with their workplace and lower levels of organizational trust. Additional factors that were hypothesized to be related to the higher rates of PTSD were involuntary hospital admissions, longer patient stays, antisocial personality traits, the physical environments of forensic units (involving more security features), and stigma. The impact of the pandemic on trauma exposure, with some clinicians working from home in isolation and without access to prior supports (including colleagues), remains in the initial stages of investigation.[30]

The settings and job-related stressors inherent to forensic practice differ significantly from the rest of medicine, rendering this population's experience of burnout as being potentially different from the rest of medicine. Although there is a paucity of literature about burnout in forensic psychiatrists, there are some studies about occupational stress in this population. In 2002, Strasburger *et al.*[31] surveyed forensic psychiatrists (response rate 20.1%) through a national organization, the American Academy of

Psychiatry and the Law (AAPL), to ascertain levels of, and contributors to, occupational stress. There was a relatively low rating of stress, on average, with 49.3 percent of respondents reporting little to no stress as a forensic psychiatrist. Notably, 78 percent of respondents reported enjoying the challenge of their forensic practice. Stressful situations, however, were identified, many of which were related to aspects of testifying or fears about testifying.

The purpose of the present study is to measure the rates of burnout and fulfillment in forensic psychiatrists in Canada and to understand the factors that contribute to burnout. Also, we aim to gather demographic information and data about the type of work in which forensic psychiatrists are engaged and use a standardized measure of professional fulfillment to understand the contributors to physician wellness in this population. This study adds to the literature by identifying contributors to physician burnout and well-being in forensic psychiatrists in Canada, which can help to identify system-level trends and potential interventions.

Methods

We carried out a cross-sectional survey of psychiatrists with membership of the Canadian Academy of Psychiatry and the Law (CAPL). All CAPL members were invited by e-mail to participate in the survey after a presentation at the 2022 CAPL conference on the subject. The study was approved by the Centre for Addiction and Mental Health Research Ethics Board.

Participants and Recruitment

At the time the survey was conducted, there were 120 psychiatrists or fellows in forensic psychiatry who were members of CAPL. The study was advertised by giving a presentation on physician wellness at the CAPL annual conference in April 2022. The recruitment period was between April and June 2022. All CAPL members were sent an invitation to participate in the survey and provided with the link to the electronic survey through e-mail using the REDCap data collection platform.[32,33]

Data Collection

The survey consisted of four sections: demographic information, work-related information, information pertaining to physician burnout (measured using the Mini-Z[34] and questions related to possible contributors to burnout), and information pertaining to physician well-being (measured using the Stanford Professional Fulfillment Index[35] and questions related to wellness).

Burnout was measured using a single question from the Mini-Z survey.[34] The Mini-Z is a 10-item instrument derived from the Physician Worklife Study,[36] and the use of the single item was validated for use in physicians, with 83.2 percent sensitivity and 87.4 percent specificity against the widely used Maslach Burnout Inventory.[37] In the single-item Mini-Z, respondents are asked to identify their symptoms of burnout based on a five-point descriptive scale, from 1 ("I enjoy my work. I have no symptoms of burnout"), 2 ("I am under stress, and don't always have as much energy as I did, but I don't feel burned out"), 3 ("I am definitely burning out and have one or more symptoms of burnout (e.g., emotional exhaustion)"), 4 ("The symptoms of burnout that I am experiencing won't go away. I think about work frustrations a lot"), to 5 ("I feel completely burned out. I am at the point where I may need to seek help"). Burnout is considered to exist at a score of 3 or more on the Mini-Z, reflecting the identification of one or more symptoms of burnout.

Professional fulfillment was measured using the Stanford Professional Fulfillment Index (SPF).[35,38] The SPF is composed of three subscales, each scored from 0 to 10: professional fulfillment subscale (six items); exhaustion subscale (four items); and interpersonal disengagement subscale (six items). More favorable responses indicate higher professional fulfillment scores and lower work exhaustion and interpersonal disengagement scores. Notably, combined scores of 3.3 or higher on the work exhaustion and interpersonal disengagement subscales are also indicative of burnout.[35]

Open-ended questions were asked to elicit contributors to physician burnout ("What are the three main contributors to your burnout?"), factors that promote physician wellness ("What are the three main contributors to your wellness at work?"), and attitudes toward work ("What do you enjoy about working in the field of forensic psychiatry?").

Data Analysis

Both quantitative and qualitative analyses were conducted. Before the analysis, survey records were screened to include only those submissions that provided a sufficient response to warrant inclusion for data analysis. Using RStudio, descriptive statistics were used to summarize the responses, and Fisher's

Table 1 Demographic Characteristics of Survey Respondents

Item	Result	Number (Percentage)
Gender	Male	23 (56.1)
	Female	18 (43.9)
Ethnicity	White or European	33 (80.5)
	Other[a]	7 (19.5)
Profession	Staff psychiatrist	39 (95.1)
	Fellow	2 (4.9)
Primary work	Forensic psychiatry	38 (92.7)
	Other	3 (7.3)
Location of employment	Academic center	25 (61.0)
	Mental health hospital	6 (14.6)
	Private practice	6 (14.6)
	Other[a]	4 (9.8)
Length of time practicing forensic psychiatry	0–5 years	8 (19.5)
	6–10 years	3 (7.3)
	11–15 years	7 (17.1)
	16–20 years	7 (17.1)
	21–25 years	4 (9.8)
	26+ years	12 (29.3)
Pattern of work	Full-time work	38 (92.7)
	Part-time work	3 (7.3)

[a]Categories combined owing to cell size <5 for individual categories.

exact tests were conducted to test for significant subgroup differences in burnout within select demographic characteristics.[39]

A thematic analysis was conducted for qualitative open-ended responses using Braun and Clark's (2006) framework.[40] The analyses of qualitative data were conducted by three study authors (T.W., R.M.J., S.C.) independently reviewing the data and meeting on several occasions until consensus was achieved on identified themes.

Results

Demographics

The survey was sent to 120 physicians, and there were 41 completed surveys returned (response rate of 34%). Respondent demographic characteristics are detailed in Table 1.

Profession

The majority of participants indicated that they worked full time ($n = 38$; 92.7%), worked as psychiatrists ($n = 39$; 95.1%), and worked in forensic psychiatry ($n = 39$; 95.1%), at an academic health center ($n = 25$, 61%), on interdisciplinary teams ($n = 34$; 82.9%). The length of time participants have been practicing in forensic psychiatry varied, with the largest group practicing for more than 26 years ($n = 12$; 29.3%). Additionally, responses varied in terms of proportion of time spent working via telemedicine, with 53.7 percent ($n = 22$) of individuals indicating that less than 25 percent of their work is done this way, 29.3 percent ($n = 12$) indicating 25 to 50 percent of their work is done this way, 14.6 percent ($n = 6$) of individuals indicating that 50 to 75 percent of their work is done this way, and only 2.4 percent ($n = 1$) indicating that almost all of their work is done via telemedicine. Although the majority of individuals indicated that the scope or focus of their work has not changed because of the pandemic ($n = 33$; 80.5%), responses varied with respect to work intensity: 46.3 percent ($n = 19$) indicated no change, 39 percent ($n = 16$) indicated more work than before the pandemic, and 14.6 percent ($n = 6$) indicated less work than before the pandemic.

Burnout and Fulfillment

Burnout was measured using Mini-Z and SPF burnout scales. Using a cutoff score of 3 or more on the Mini-Z, 20 of 43 respondents (46.5%) reported burnout. Using a cutoff of 1.33 or above on the SPF burnout scale, 21 of 41 (51.2%) respondents reached criteria for burnout. As expected, both scales were highly correlated (tetrachoric correlation coefficient = .98, SE = .03, $P < .0001$). In view of the high correlation between these measures, only the SPF burnout scale was used for further analyses. The SPF fulfillment scale responses were dichotomized, with those scoring 3 or above categorized as being fulfilled. Using this categorization, 10 (24.4%) individuals reported work fulfillment and the remaining 31 (75.6%) did not. We investigated the relationship between both burnout and fulfillment and attitudes and characteristics of work using Fisher's Exact test (see Table 2).

Results indicated that those who were earlier in their career experienced more burnout compared with those who had worked longer. More than four-fifths of respondents working 10 years or fewer in forensic psychiatry reported burnout, whereas less than one-fifth of those who had worked 20 or more years reported burnout. The association between burnout and number of years in forensic psychiatry was significant using the Fisher's exact test ($P = .002$). Regarding gender, we found that two-thirds of women

Table 2 Results of Fisher's Exact Test for Association between Demographic Characteristics and Attitudes with Burnout and Fulfillment

	Burnout			Fulfillment		
Demographic Characteristic	No	Yes	*P*	No	Yes	*P*
Number of years in forensic psychiatry						
0–10	2 (18.2)	9 (81.8)	.002	10 (90.9)	1 (9.1)	.430
11–20	5 (35.7)	9 (64.3)		10 (71.4)	4 (28.6)	
20+	13 (81.3)	3 (18.8)		11 (68.8)	5 (31.3)	
Gender						
Female	6 (33.3)	12 (66.7)	.08	14 (77.8)	4 (22.2)	.606
Male	14 (60.1)	9 (39.1)		17 (73.9)	6 (26.1)	
Considered leaving job?						
No	12 (70.6)	5 (29.4)	.535	13 (76.5)	4 (23.5)	.914
Yes	8 (33.3)	16 (66.7)		18 (75.0)	6 (25.0)	
Considered leaving forensic psychiatry?						
No	18 (58.1)	13 (41.9)	.040	22 (70.8)	9 (29.0)	.219
Yes	2 (20.0)	8 (80.0)		9 (90.0)	1 (10)	
Professional values align with your institution?						
No	3 (20.0)	12 (80.0)	.005	14 (93.3)	1 (6.67)	.047
Neutral	17 (65.4)	9 (34.6)		17 (65.4)	9 (34.6)	
Yes	20 (48.8)	21 (51.2)		31 (75.6)	10 (24.4)	
Values align with colleagues?						
No	0 (0)	4 (100)	.117	3 (75.0)	1 (25.0)	1.00
Neutral	4 (50.0)	4 (50)		6 (75.0)	2 (25.0)	
Yes	16 (55.2)	13 (44.8)		22 (75.6)	7 (24.1)	
Amount of time on telemedicine						
<25%	10 (45.5)	12 (54.6)	.449	15 (68.2)	7 (31.8)	.373
25–50%	5 (41.7)	7 (58.3)		11 (91.7)	1 (8.33)	
>50%	5 (71.4)	2 (28.6)		5 (71.4)	1 (28.6)	
Impact of pandemic on workload						
Working less	3 (50.0)	3 (50.0)	.482	4 (66.7)	2 (33.3)	.887
Working more	6 (37.5)	10 (62.5)		12 (75.0)	4 (25.0)	
No change	11 (57.9)	8 (42.1)		15 (79.0	10 (24.4)	
Amount of time on EMR						
High	12 (54.6)	10 (45.5)	.132	16 (72.7)	6 (27.3)	.89
Medium	5 (71.4)	2 (28.6)		6 (85.7)	1 (14.3)	
Low	3 (25.0)	9 (75)		9 (75.0)	3 (25.0)	
How much control do you have over workload?						
Low	1 (10.0)	9 (90.0)	.017	9 (90.0)	1 (10.0)	.212
Medium	10 (62.5)	6 (37.5)		13 (81.3)	3 (18.8)	
High	9 (60.0)	6 (40.0)		9 (60.0)	6 (40.0)	

reported burnout and just over one-third of men, although the association was marginally nonsignificant ($P = .08$). Twice as many of those considering leaving forensic psychiatry reported burnout compared with those not considering leaving (80% compared with approximately 40%), which was significant using Fisher's exact test ($P = .04$). We also found significant associations between burnout and whether one's professional values align with one's institution, with 80 percent of those who reported misalignment of values experiencing burnout, compared with 35 percent and 51 percent who reported neutral or positive alignment, respectively ($P = .005$). Finally, we found a significant association between burnout and perception of control over workload. Among those reporting low levels of workload control, 90 percent experienced burnout, compared with around 40 percent who had medium or high levels of control over workload ($P = .017$).

With regard to fulfillment, we found only one significant relationship, which was between value alignment and fulfillment. Only one respondent (7%) who experienced no alignment between personal and divisional values felt fulfilled, compared with 35 percent and 24 percent of those who had neutral or positive alignment, respectively ($P = .047$).

A logistic regression was completed, with variables having Fisher's exact $P < .1$ being entered into the model. Results revealed that length of time in practice was significantly inversely associated with burnout (OR = .27, 95% CI .09–.82, $P = .021$), as were values aligning with division (OR .16, 95% CI .03–.82, $P = .021$; see Table 3).

Table 3 Logistic Regression Model of Variables Associated with Burnout

Variable	Odds Ratio	*z*	*P*	95% CI
Gender	0.51	−0.79	.428	0.06–2.71
Length of time in practice	0.27	−2.30	.021	0.09–0.82
Values align with division	0.16	−2.06	.04	0.03–0.91
Control over work	0.53	3.16	.26	0.17–1.60

Factors Affecting Burnout and Wellness

In the qualitative part of the survey, respondents were asked to identify the top three factors contributing to burnout, if any, at the current time or in the last three years. The most common contributors, in order of decreasing frequency, were: volume of work, including unpaid work and work done virtually (24 responses); bureaucracy and administration (21 responses); leadership and culture factors, including a lack of control over work, not being listened to, and a lack of support (11 responses); and SARS-CoV-2 (COVID-19)–related factors, including ethics quandaries and patient restrictions (10 responses). Non–work-related stressors (six responses) and factors inherent to the nature of the work in forensic psychiatry (six responses) were less frequent themes (see Table 4).

When asked to list the top three factors contributing to their wellness, participants identified, in order of descending frequency: informal support of colleagues and teams (28 responses); flexibility and autonomy in their workplace (24 responses); meaning, purpose, and stimulation of their work, including patient-related factors, teaching, and research (18 responses); feeling valued and supported in their workplace, including receiving positive feedback from leadership and lawyers, and fair financial compensation (15 responses); and lifestyle factors, including exercise, vacation, and social opportunities (four responses; see Table 5).

Regarding what respondents liked about the field of forensic psychiatry, the most common responses, in descending order, were: intellectual challenge and stimulation, including the legal aspects of the work (30 responses); meaning and impact, including on patient outcomes (21 responses); variety of the work (15 responses); the work environment, including colleagues and teams (eight responses); and flexibility (four responses; see Table 6).

Discussion

This study identified the prevalence of, and factors contributing to, burnout and professional fulfillment in forensic psychiatrists in Canada. Physician burnout has an impact on retention of physicians and requires

Table 4 Contributors to Burnout

Factor	Quotation from Survey
Volume of Work	
Unpaid work	Was working too much on uncompensated work
Virtual work	Virtual work and meetings have completely taken over my life. There is an unspoken expectation to work remotely, respond to e-mails, attend zoom meetings, etc., at all times, even while not being paid for that time.
Bureaucracy and administration	Incredible bureaucracy in hospitals (mandatory training, inefficient EMR, etc.) Lack of autonomy for physicians within the provincial health care system. The provincial health care system is increasing the level of bureaucracy in the system without improving patient care. Lack of opportunities to do the work I want to and feeling "stuck in the system."
Leadership and culture	Lack of say in decisions made by management. . . . We get told to "put your head down and do your job" when concerns are raised. Relationships with some negative colleagues Hospitals never take physician input
SARS-CoV-2 (COVID-19)–related factors	The pandemic and other current social issues and crises make my work seem less meaningful in comparison. I have serious ethical and moral qualms regarding the restrictions we have placed on inpatient [provincial review board] patients over the course of the pandemic. It seems like an abuse of power that's not related to forensic risk and I struggle with my participation and complicity in it. Constant adaptation during pandemic
Non–work-related stressors	High demands and difficulty to conjugate life with young children Factors outside of work (grief, illness. . .)
Factors inherent to the nature of the work in forensic psychiatry	Responsibility for decisions regarding therapeutic risks

Table 5 Contributors to Wellness at Work

Factor	Quotation from Survey
Informal support of colleagues and teams	Very collegial and flexible colleagues; good relationships with multidisciplinary staff Free time to connect with colleagues and coworkers "in the hallway" Interdisciplinary team work . . . Discussions with colleagues
Flexibility and autonomy in their workplace	Control over my schedule Working part-time, flexible work hours and the ability to work primarily from home Control of my time Control of work load
Meaning, purpose and stimulation of their work	
Patient-related factors	Intellectually challenging cases that I feel challenge my skills The patient and evaluee population Making a difference to people's lives
Teaching and research	Teaching to the residents
Feeling valued and supported in their workplace	
Receiving positive feedback from leadership and lawyers	Feeling appreciated by leadership. Feeling that my superiors have my back. Receiving positive feedback from legal community and other clinicians about the quality of my work. Recognition by peers and supervisors of my value Feeling included, being informed
Fair financial compensation	Compensation for extra work
Lifestyle factors	Outside activities and exercise An office with a window

Table 6 Items Identified by Respondents as to What They Enjoy about the Field of Forensic Psychiatry

Factor	Quotations from Survey
Intellectual challenge and stimulation	The intellectual challenge of figuring out complex cases The interface of psychiatry and the law and translating knowledge back and forth Rigor, the intellectual challenge, medico-legal analysis Love the reports for court. Love legal analyses. Enjoy working with lawyers and providing testimony The complexity of the cases There are always new challenges and difficult cases to keep me engaged and interested
Meaning and impact	Seeing patients recover and safely reintegrate; managing really challenging cases where others have failed I feel good in knowing that I am trying my best to help my correctional population who have dealt with extremes in pain and suffering. Feels like the issues are really meaningful I believe I am contributing to Canadian society by working intensely with the criminal justice system and mentally abnormal offenders. Ability to treat patients successfully and reintegrating them in to community as valued member
The work environment, including colleagues and teams	Rehab work and the possibility of treating patients in an interdisciplinary team Enjoy working in a team-based environment Great colleagues
Variety	The variety of areas of practice (inpatient, outpatient, corrections, variety of content in cases) Variety of work (assessment, rehabilitation)
Flexibility	Flexibility of work The patient population, flexibility, and breadth of experiences flexibility to choose what I do

a response at multiple levels. Just over half of the physician respondents in this study reported experiencing burnout as measured by the SPI (52.1%). The results are consistent with other surveys in Canada, which have indicated high levels of burnout that elevated even further since the onset of the pandemic.[15,16]

Survey responses provided a window into the demographics and work practices of forensic psychiatrists in Canada. The majority of respondents were over age 61, with 30 percent indicating they had been in practice for more than 26 years. Most of the respondents worked full-time in forensic psychiatry,

on interdisciplinary teams, with two-thirds being in academic health centers.

Survey results indicated higher levels of burnout for early-career forensic psychiatrists, who perceived that they had low control over their workload. This finding is in line with the multiple other studies and may be related to several factors, including less experience, demands of personal life, the pressures of professional advancement, and building financial stability.[4,17,18] Despite early-career physicians being consistently identified as a vulnerable population for burnout, the phenomenon is commonly defined by identifying "prolonged" exposure to "work-related" stress as a key precursor to burnout.[1] Our findings may suggest a need to re-examine the understanding of the trajectory of burnout and the relative contributors of non–work-related factors commonly described by early-career physicians. Further, the distinction of work-related and non–work-related factors may itself be a false concept, given the overlap of both with factors driving other mental health concerns such as depression.[41] Future researchers may want to expand the considerations of survey data beyond identification of a rate of burnout to be addressed but rather as a constellation of factors, some arguably unique to the field of forensic psychiatry that may affect practitioners' mental health, their experience of work, and their decision-making about the nature of engagement in the profession.

A higher proportion of female forensic psychiatrists reported burnout in the survey, consistent with the broader literature, although this difference was not found in multivariate analysis after controlling for other variables; this finding warrants further research with a larger sample size. Another significant finding was that those participants whose values did not align with their workplace were more likely to report burnout. Rodrigues *et al.*[29] identified that forensic front-line clinicians tended to report a greater degree of incongruence with their workplace and lower levels of organizational trust overall, potentially related to the perceived differences in forensic practice that may not be readily translatable to the broader institution. Perceived areas of misalignment with the broader organization may be both contributors to, and highlighted by, the experience of burnout. The qualitative findings in the current study indicate that feeling valued in the workplace was identified as a salient and the third most common factor to contributing to wellness in survey respondents. Intellectual challenge and stimulation was the most commonly reported factor that respondents enjoyed about the field of forensic psychiatry, and this factor included complex cases and the interface of psychiatry and the law. Interestingly, complexity and challenging clinical and legal circumstances have been identified as contributors to burnout in nonforensic clinicians but may be a driver for some physicians to choose a career in forensic psychiatry. In contrast to the study by Strasburger *et al.*[31] looking at contributors to stress in forensic psychiatrists, respondents in this study identified the interface with the legal system and lawyers as something that they liked about the field of forensic psychiatry. Given the identification of low control over workload as a contributor to burnout, it was unsurprising that flexibility and variety were also identified as factors that respondents liked about the field of forensic psychiatry.

Responses in the current study are consistent with the work of Gagne and Deci,[42] highlighted more recently by Hartzband and Groopman,[43] considering the value of differentiating intrinsic and extrinsic motivation in the workplace. Engagement at work is driven both by interest in and satisfaction from the activity itself, or from tangible external rewards. The forensic psychiatrist respondents in the current study identified factors that relate to components of intrinsic motivation (autonomy, competence, and relatedness) as promoting wellness. It may be that bolstering these areas has more impact than attempts to manipulate external motivators and engages forensic physicians in a more sustainable way.

Regarding the impact of the pandemic, more than half of the respondents indicated that less than 25 percent of their work was done via telemedicine, and more than 80 percent indicated that the scope and focus of their work had not changed as a result of the pandemic. This finding is in contrast to other studies that have identified the adaptation to increased amounts of virtual care and changes in the focus of work as two factors related to the elevated rates of burnout among physicians during the pandemic. Still, pandemic-related factors were identified as the fourth most common factor that affected burnout among forensic psychiatrists, with respondents specifying ethics concerns, including restrictions on patients in inpatient environments owing to the pandemic.

There are several limitations to the current study that may affect generalizability. The survey was

conducted with forensic psychiatrists who belong to a national society, and advertised at a national conference, thus the sample may not be representative of all Canadian forensic psychiatrists. Further, it may be reasonable to consider that individuals experiencing burnout may be less likely to participate in national conferences or surveys, such as the one being presented here, which may result in an underestimate of the rate of forensic psychiatrists' experiencing burnout. Also, most responders were from academic centers; forensic psychiatrists practice in different environments. Therefore, variables to consider regarding burnout and wellness in community or other practice environments is an area for further study. Although the response rate was typical for e-mail surveys of this nature, the timing of the survey during the pandemic theoretically may have affected response rate and content.

Recommendations and Future Work

Once there is recognition of the impact of burnout and the factors contributing to it, the task becomes identifying meaningful interventions to address the problem. Historically, interventions at the individual level have been explored with forensic mental health nurses, with some appearing to have little impact on burnout (i.e., clinical supervision) while others have been more effective (i.e., mindfulness-based interventions).[44,45] The current approach to physician burnout, more generally, involves a shift from solely focusing on individual interventions to addressing systemic factors that drive occupational distress and affect professional fulfillment.[11] The findings of this study provide compelling rationale to adopt this approach in forensic psychiatry, given the high prevalence of burnout among its practitioners.

Four main recommendations come from this survey. First, leadership within institutions and national forensic professional bodies should commit to recognizing and adopting strategies to address burnout within a continuous improvement framework.[46] Second, early-career psychiatrists are at greatest risk for burnout, which has an impact on retention and highlights the importance of mentorship and peer support. Third, although alignment of values cannot always be achieved between forensic psychiatrists and institutions, leadership should be aware of the importance of communication and consultation with psychiatrists as a contributor to professional fulfillment. Finally, it is recommended that both individual physicians and institutions consider the importance of a sense of control over workload (autonomy and flexibility) in promoting professional fulfillment, which may entail a review of job descriptions and expectations as well as work plans. It is imperative that workplaces examine how forensic psychiatrists work, to optimize personal agency.

Survey findings can raise awareness of physician burnout within the field of forensic psychiatry. Longitudinal studies and repeated measures of burnout over time will assist in monitoring trends and external factors (e.g., the pandemic) that may affect wellness, as well as further considering the variables that affect recruitment and retention. Forensic psychiatry is a highly specialized field in Canada, with a relatively small number of practitioners across multiple geographic regions and organizations. Given the importance of organizational and systemic interventions to address burnout and promote wellness, it will be useful to identify national initiatives that resonate with practitioners in the field (i.e., mentorship, professional development, and peer support by forensic colleagues), as well as individual and organizational initiatives that also have an impact on workplace culture and wellness. Future work should also focus on bolstering relevant supports for early-career and female forensic psychiatrists, as well as enhancing the understanding of variables that contribute to burnout and wellness for minority forensic psychiatrists.

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