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# Ethics, Risk and Recovery—Challenges in Forensic Practice

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The practice of recovery-oriented care with individuals who have been found unfit to stand trial or not criminally responsible, and who are subject to review board dispositions, presents a variety of ethical tensions. The assessment and management of risk in a rehabilitative context raises issues of autonomy, confidentiality, and conflicting roles. Awareness of and, where possible, resolution of these conflicts is necessary for the success of the recovery paradigm in this context.

**Key words:** Forensic psychiatry, ethics, risk, recovery, autonomy, confidentiality, conflicting role

An aspect of forensic psychiatry that receives a great deal of attention is that of assessment, whether it be of fitness to stand trial, criminal responsibility, or risk of violence. Much has been written about the importance of separating the assessment role from that of the treating clinician. It is clear that failure to do so can undermine objectivity [1]. However, much less clear has been the guidance for forensic clinicians who are placed in the roles of caregiver and risk manager [2,3].

The clinical care of individuals with severe mental illness can be one of the most rewarding aspects of forensic practice. Individuals who have come in contact with the legal system as a result of psychiatric issues are often able to benefit greatly from the treatment and rehabilitation offered in forensic facilities and programs. But the care of these individuals is fraught with ethical issues, which must be acknowledged and managed. The coercive nature of involuntary treatment must be counterbalanced by legal safeguards, and treatment should only take place with capable informed consent from patients or substitute decision-makers. Patients must be notified and reminded of any limits to

confidentiality, which may be more common in the forensic environment than in the civil sphere. Despite custodial responsibilities, clinicians must be reminded that the focus of their work must always be care [4].

In recent decades, the treatment and rehabilitation of people with mental illness have been widely influenced by the recovery model of care [5]. More recently, this paradigm has begun to gain traction in forensic mental health services [6]. The increased application of recovery principles in this area has brought into relief numerous apparently incompatible features. For example, the recovery model emphasizes the individual's well-being and autonomy in decision-making, whether it be treatment or other goals, such as personal activities, employment, or place of residence. This is in contrast to the more traditional and restrictive model of care found in secure facilities, which may involve coerced treatment, prescribed activities, and at times highly restrictive living arrangements [7]. Furthermore, the act of risk assessment itself, long a cornerstone of forensic practice, may have harmful consequences in and of itself [8].

The compatibility of the recovery model with the agenda of forensic psychiatric care has been recently addressed in the literature. Several themes are emerging. First, recovery-oriented best practices from general psychiatry can and should be applied to forensic populations. Hope, empowerment, and social reintegration are achievable goals within the overarching context of secure care, keeping in mind the need to do additional work of addressing the causes and consequences of offending. Second, the importance of therapeutic relationships in building trust and facilitating autonomy in goal setting and problem-solving is becoming clear [9,10]. Numerous promising steps have been taken toward building such therapeutic alliances in the forensic context. Efforts to include forensic patients in the decision-making process, as well as the assessment and formulation of risk, have recently highlighted promising results in patient satisfaction and outcomes [11,12].

The application of recovery principles in forensic care has become increasingly prominent in recent years and will no doubt continue to grow. Not only has this trend brought to light many of the difficulties of traditional models of care, such as stigmatization, isolation and disempowerment, but it has also highlighted the importance of patient involvement and, where possible, autonomous decision-making as an important component of the therapeutic enterprise. Finally, it brings into clear focus the importance of the therapeutic alliance to treatment and the maintenance of public safety.

**Conflict of Interest:** none

## References

1. Appelbaum PS. Ethics and forensic psychiatry: Translating principles into practice. *J Am Acad Psychiatry Law*. 2008;36(2):195-200.
2. Adshead G. Care or custody? Ethical dilemmas in forensic psychiatry. *J Med Ethics*. 2000 Oct;26(5):302-4. <https://doi.org/10.1136/jme.26.5.302>.
3. Robertson MD, Walter G. Many faces of the dual-role dilemma in psychiatric ethics. *Aust N Z J Psychiatry*. 2008 Mar;42(3):228-5.
4. Munetz MR. Black robe/white coat: Mental health providers must reclaim the role of caring clinician. *Psychiatr Serv*. 2020 Apr;71(4):403-4.
5. Anthony WA. Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal*. 1993;16(4):11-23. <https://doi.org/10.1037/h0095655>.
6. Simpson AI, Penney SR. The recovery paradigm in forensic mental health services. [Editorial]. *Crim Behav Ment Health*. 2011 Dec;21(5):299-306. <https://doi.org/10.1002/cbm.823>.
7. Kaliski SZ, de Clercq HG. When coercion meets hope: Can forensic psychiatry adopt the recovery model? *Afr J Psychiatry (Johannesburg)*. 2012 May;15(3):162-6. 166. <https://doi.org/10.4314/ajpsy.v15i3.20>.
8. Nilsson T, Munthe C, Gustavson C, Forsman A, Anckaräter H. The precarious practice of forensic psychiatric risk assessments. *Int J Law Psychiatry*. 2009 Nov-Dec;32(6):400-7. <https://doi.org/10.1016/j.ijlp.2009.09.010>.
9. Mann B, Matias A, Allen J. Recovery in forensic services: Facing the challenge. *Advances in Psychiatric Treatment*. 2014;20(2):125-31.
10. Dorkins E, Adshead G. Working with offenders: Challenges to the recovery agenda. *Advances in Psychiatric Treatment*. 2011;17(3):178-87.
11. Papapietro DJ. Involving forensic patients in treatment planning increases cooperation and may reduce violence risk. *J Am Acad Psychiatry Law*. 2019 Mar;47(1):35-41. <http://jaapl.org/content/47/1/35>.
12. Ray I, Simpson AIF. Shared risk formulation in forensic psychiatry. *J Am Acad Psychiatry Law*. 2019 Mar;47(1):22-8. <http://jaapl.org/content/47/1/22.long>.

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# A Cross-Sectional Survey of Patients and Staff on Inpatient Forensic Psychiatric Units in Canada During the COVID-19 Outbreak

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Outbreaks of the coronavirus disease (COVID-19) on inpatient forensic psychiatry units present a unique challenge as early release is not possible and some facilities were not designed to achieve sustained social distancing. The enforcement of droplet and contact (D&C) precautions required by Public Health Ontario during an outbreak creates further confines and restrictions for patients that are typically subject to considerable constraints during their care. From December 2020 to January 2021, 30 clinicians and 12 patients on inpatient forensic psychiatry units under unit-wide D&C precautions during COVID-19 outbreaks completed a cross-sectional survey about their experience. We also conducted virtual focus groups to triangulate the qualitative feedback from clinicians. The survey and focus group discussions revealed similar themes of enablers, barriers, and desired changes to care provision during an outbreak. We discuss findings within the broader context of outbreak interventions and the provision of services to those living and working on forensic psychiatry inpatient units experiencing outbreaks requiring the unit-wide implementation of D&C precautions.

**Keywords:** COVID-19, schizophrenia, inpatient, forensic, isolation, outbreak

## Introduction

Individuals confined to secure psychiatric environments are more vulnerable to the coronavirus disease (COVID-19) due to their physical and psychiatric comorbidities, the challenges of early release, and facilities and inpatient environments often not being designed to achieve sustained social distancing [1,2]. While necessary to protect the public, the restrictions placed on patients in forensic inpatient environments also bring negative consequences, including violent events and deterioration of mental status [3], poor ward atmosphere, and patient experiences of punitiveness and violation of dignity [4].

The enforcement of droplet and contact (D&C) precautions are implemented unit-wide for 14 days when a public health COVID-19 outbreak is declared (i.e., two or more infected patients) [5]. For staff, D&C precautions include enhanced hand hygiene, increased use of personal protective equipment (PPE) (e.g., mask, eye protection, gown, gloves), and performance of enhanced cleaning tasks. D&C precautions needed during an infectious outbreak create further confines and restrictions for patients who are typically subject to considerable constraints during their care. For clients, D&C precautions include isolating to their rooms on the unit, monitored use

of shared washrooms with enhanced cleaning between uses, mask compliance in all shared spaces of the unit, and a hold on all off-unit visitors (e.g., family, food deliveries). If a patient is unable to abide by isolation practices reasonably or safely, hospital policy required all reasonable attempts to be made to use alternative, least restrictive, or least intrusive strategies before using seclusion or restraint to limit the risk of exposure or spread.

The increase in restrictions and limitations associated with D&C precautions poses ethical concerns about additional restrictions of liberties placed on patients already confined. Reviews of the literature [1,2] identify changes to care delivery and outbreak management strategies for units on D&C precautions. However, little is known about the acceptability of these interventions to patients and staff, or the impact on the mental health and well-being of the people living and working on units during an outbreak. In this exploratory study, we surveyed patients and staff from two minimum-security forensic psychiatry inpatient units to gain insight into the experience of living and working in these environments under D&C precautions during the COVID-19 pandemic and develop responses to these experiences.

## Methods

### *Design*

For this cross-sectional study, we recruited patients and staff on two inpatient forensic psychiatry units (a total of 40 beds) that had experienced a COVID-19 outbreak at the Centre for Addiction and Mental Health (CAMH). The study involved the use of both quantitative and qualitative methodologies obtained through surveys and focus groups.

### *Participants*

All patients and staff on two inpatient minimum secure forensic units experiencing outbreaks were invited to participate in the survey about one-month postoutbreak. CAMH has 100 minimum secure forensic beds located in one out-of-date tower. These units have a small

footprint, limited bedroom and lounge space, and shared toilet facilities. Units are highly staffed (daily staff to patient ratio is about 1:1.8) and staff accommodation is cramped.

Most patients have a primary diagnosis of a psychotic disorder. Neurodevelopmental and degenerative mental disorders are common comorbidities. These conditions gave rise to the heightened risk of COVID-19 outbreaks [1]. At the time of our study, patients were all found not criminally responsible on the grounds of mental disorder. We surveyed the two minimum secure units that had experience recent COVID-19 outbreaks. A total of 40 patients were invited to participate. Participation in the survey and focus groups was not mutually exclusive. Patients were invited to participate in-person on the unit and given the option to complete the survey independently or facilitated to complete surveys at their request by a clinician external to their unit not involved in their care.

Clinicians were invited to participate via email.

### *Data collection*

Quantitative and qualitative data were obtained through patient and staff surveys as well as staff focus groups. Both the surveys and focus groups contained a mix of closed- and open-ended questions created specifically for this study. Surveys were anonymously conducted online through REDCap and took about 15 minutes to complete. The patient survey consisted of nine questions exploring the attitudes, feelings, overall well-being, and quality of life experienced while residing on the unit during a COVID-19 outbreak. The staff survey consisted of 10 questions exploring the experiences and perspectives of delivering care to forensic inpatients during an outbreak and under D&C precautions. In addition to the survey, clinicians from both Unit A and Unit B were invited to participate in one of three focus groups that further explored their experiences in providing patient care, as well as barriers they experienced during a COVID-19 outbreak. Focus group data were used to triangulate



**Table 1: Methods of data analysis***Stages 1 and 2: Coding comments about decreased programming and combining the statements*

<b>Comments</b>	<b>Coded comments</b>	<b>Subcategories</b>
“Couldn’t do anything” (PSR) “Boring” (PSR)	Limited programs available to clients resulted in increased boredom	Decreased programming being offered on and off the unit
“Most of the group programs in and off the unit has been cancelled” (CSR) Regarding interventions, “a lot are in comfort room, which is shared; not able to use during outbreak because clients were in their rooms and it would involve a lot of cleaning” (occupational therapist, CFG)	Clear reduction in the number of programs offered on the unit	
“A lot of interventions listed we don’t have enough to give a single one to each client” (nurse, CFG)	Lack of resources needed to run programs for everyone on the unit	
“Less activity/programs, if there is a program, it will be restricted” (CSR) “We couldn’t run any in-person groups and taking on the virtual groups was challenging. Types of groups we are able to provide are not the same as we did, and it’s met with a lot of disappointment from clients” (recreation therapy, CFG)	Programs that were running were subjected to safety restrictions	
“It was hard to not even go to the yard if you don’t have COVID you shouldn’t be penalized like that” (PSR)	Limited access to outdoor activities	
“We have a client on the unit who hasn’t been in the fresh air in months” (occupational therapy, CFG) “Limited access to fresh air” (CSR) “Unable to get fresh air” (CSR)		
“Clients not being able to access fresh air because they aren’t able to wear a mask properly is a bit of an issue” (occupational therapist, CFG)	Restrictions in programming were sometimes a result of an inability to adhere to D&C precautions	
“Decreased physical activity and engagement in therapeutic groups” (CSR) “Physical activity limitations” (CSR)	There was a decrease in physical activity	

*Stage 3: Combining subcategories with similar content into generic categories*

<b>Subcategories</b>	<b>Generic categories</b>
Change in living conditions The need for isolation of clients in their rooms Decreased programming being offered on the unit Decreased socialization among clients and with unit staff Restricted outside services into the unit (e.g., online shopping, ordering food) Paused progression to discharge into the community	Decreased well-being and quality of life of clients on the units

*continued*

**Table 1 continued***Stage 4: Combining the generic categories into main categories*

<b>Generic categories</b>	<b>Main categories</b>
Decreased well-being and quality of life of clients on the unit Droplet and contact (D&C) precautions Tension between clinical staff, as well as between clients and clinicians Limited resources experienced by clients and clinicians Leadership barriers	Barriers to quality of care during COVID-19 outbreak precautions on forensic units
More time spent in room allowing participation in individual activities Patients enjoyed access to electronic devices and services Supportive team dynamics Dedication to safety of both clients and clinicians	Supportive aspects of quality care during COVID-19 outbreak precautions on forensic units
Promote client well-being and quality of life Improved access to and cleanliness of bathrooms on the unit Increased access to resources for clinicians and clients Proactive leadership from the organization	Changes desired to improve quality of care in future outbreak precautions on forensic units

Note: PSR = patient survey response, CSR = clinician survey response, CFG = clinician focus group

survey data. Focus groups lasted between 30 and 90 minutes. We recorded audio to ensure accuracy.

### *Data analysis*

We began data analysis by listening to audio recordings of focus groups and transcribing them verbatim as well as extracting written comments from the surveys. Next, an inductive content analysis [6] was performed by two researchers (D. Moyer and S. Umbrello). First, quotations were coded and similar statements were grouped to form subcategories. The subcategories were then combined with other similar contents into generic categories. Lastly, the generic categories were combined to create main categories or themes. An example can be seen in Table 1.

### *Ethics*

According to the policy activities that constitute research at CAMH, this project met the criteria for operational improvement activities. Study design and data collection for patients and staff was approved through the institutional quality performance ethics review process. All participants provided informed consent.

## **Results**

### *Sample characteristics*

Survey responses were obtained from 12 patients (Unit A = 5, Unit B = 7, response rate = 32.4%) and 30 staff (Unit A = 11, Unit B = 19, response rate = 38.45%). Seven staff participated in focus groups. People from various professional disciplines participated in the survey and focus groups, including nursing (14, 46.7%), recreation therapy (3, 10.0%), behaviour therapy (3, 10.0%), occupational therapy (2, 6.7%), program assistant (2, 6.7%), other clinician (5, 16.7%) and unspecified (1, 3.3%). Quantitative survey results can be found in Tables 2 and 3.

### *Qualitative results*

While coding qualitative client and clinician survey and focus group responses, three main themes emerged:

1. barriers to quality care,
2. supportive aspects of care, and
3. suggestions for changes to improve the quality of care in the event of a future outbreak.

**Table 2: Clinician quantitative survey results, n = 30**

Question	Results, n (%)
How do you feel the COVID droplet and contact precautions have impacted, if at all, your clients' quality of life on the unit?	16 (55.2%) COVID precautions both positively and negatively influenced individual client quality of life on the unit 11 (37.9%) COVID precautions negatively influenced client quality of life on the unit 2 (6.9%) COVID precautions positively influenced client quality of life on the unit 1 (3.3%) Did not respond
What specific responses did you see from clients?	24 (80.0%) Increase in requests to staff 20 (66.7%) Stayed in room without issue 19 (63.3%) Neglected ADLs (activities of daily living) 15 (50.0%) Required seclusion 15 (50.0%) Bizarre behaviours 14 (46.7%) Increased behaviours 7 (23.3%) Decreased behaviours 6 (20.0%) Other 5 (16.7%) Violent outbursts 5 (16.7%) No specific behaviours observed 4 (13.3%) Increased enjoyment 1 (3.3%) Improved activities of daily living
Did client responses evolve throughout implementing the restrictions?	26 (89.7%) Yes 3 (10.3%) No 1 (3.3%) Did not respond
Did you feel supported during the COVID droplet and contact precautions?	17 (56.7%) Yes 9 (30.0%) Somewhat 4 (13.3%) No
What was hard about the COVID droplet and contact precautions?	24 (80.0%) Client isolation 23 (76.7%) Client well-being 22 (73.3%) Maintaining D&C (droplet and contact) precautions 17 (56.7%) Limited client contact 16 (53.3%) Insufficient staffing 14 (46.7%) Alternative programming 12 (40.0%) Logistics of virtual care 8 (26.7%) Insufficient PPE (personal protective equipment) 7 (23.3%) Other (please specify)
What was easy about the COVID droplet and contact precautions?	18 (72.0%) Sufficient PPE 5 (20.0%) Sufficient staffing 5 (20.0%) Client contact 3 (12.0%) Virtual care 3 (12.0%) Client isolation 3 (12.0%) Other (please specify) 2 (8.0%) Client well-being 2 (8.0%) Programming 2 (8.0%) Maintaining D&C precautions
How do you feel the COVID-19 droplet and contact precautions influenced the relationship between clients and clinicians on the unit?	18 (60.0%) Mixed impact 7 (23.3%) No impact 4 (13.3%) Negative impact 1 (3.3%) Positive impact
Did the precautions contribute to any potential conflict or tension on your unit?	17 (56.7%) No 13 (43.3%) Yes 1 (3.3%) Did not respond

*continued*

**Table 2 continued**

Question	Results, n (%)
What barriers did you come across in your practice?	24 (80.0%) Emotional exhaustion/burnout 16 (53.3%) Insufficient staffing 12 (40.0%) Alternative intervention delivery 3 (10.0%) Other (please specify)
Do the restrictions need to be adapted to better meet the needs of clients within an inpatient forensic practice setting?	14 (48.3%) Yes 15 (51.7%) No 1 (3.3%) Did not respond
How did you feel during the outbreak on the unit?	25 (83.3%) Stressed 23 (76.7%) Tired 22 (73.3%) Anxious 18 (60.0%) Overwhelmed 12 (40.0%) Nervous/scared 5 (16.7%) Other 4 (13.3%) Neutral
What coping strategies did you use, if any?	20 (71.4%) Asking for support when needed 20 (71.4%) Self-care 13 (46.4%) Relaxation/meditation 13 (46.4%) Time management 13 (46.4%) Creating boundaries 10 (35.7%) Mindfulness 8 (28.6%) Social time with others 7 (25.0%) Physical activity 3 (10.7%) Leisure activities 2 (7.1%) Other (please specify)

The qualitative results are summarized in Table 4.

### Barriers to quality of care

The main barriers to patient care were grouped into the following five generic categories:

1. decreased well-being and quality of life of patients on the unit,
2. D&C precautions,
3. tension between clinical staff, as well as between patients and clinicians,
4. limited resources experienced by patients and clinicians, and
5. leadership challenges.

One of the barriers affecting the decreased well-being and quality of life of patients on the units was the change in living conditions and the need to isolate patients. Many of the

patients were restricted to their rooms, unable to access the common areas on the unit during lockdown periods. These changes were a big adjustment for the patients on the units. One clinician stated, “clients found it difficult to adjust to staying in their rooms for a long period of time” (survey). The changes in their usual day-to-day structure undoubtedly had an impact on patient well-being, as one patient stated they “felt lonely” (survey). The changes were also clearly observed by staff working on the unit, with clinicians stating, “Clients became more isolated in their room and more depressed” (survey). “Being confined to their rooms for 14+ days was challenging for some” (survey).

In analyzing the survey responses, one of the biggest barriers affecting the overall well-being of patients was the decrease in programming being offered. As a result of the restrictions and the need to protect the health and safety of patients and clinicians, many of the programs

**Table 3: Patient quantitative survey results, n = 12**

Question	Results, n (%)
How do you feel the COVID droplet and contact precautions have impacted, if at all, your quality of life on the unit?	5 (45.5%) COVID precautions both positively and negatively influenced individual client quality of life on the unit 4 (36.4%) COVID precautions negatively influenced client quality of life on the unit 2 (18.2%) COVID precautions positively influenced client quality of life on the unit 1 (8.3%) Did not respond
What things did you want to do that you weren't able to because of the COVID droplet and contact precautions?	10 (83.3%) Go outside 7 (58.3%) Other (please specify) 5 (41.7%) Socialize with others 5 (41.7%) Have visitors 3 (25.0%) Group meals 2 (16.7%) In-person groups
How did you feel during the outbreak on the unit?	9 (75.0%) Other (please specify) 5 (41.7%) Lonely 4 (33.3%) Sad 3 (25.0%) Tired 2 (16.7%) Angry 2 (16.7%) Scared 2 (16.7%) Neutral 1 (8.3%) Happy
What was hard about the COVID droplet and contact precautions?	9 (75.0%) Staying in my room 7 (58.3%) Other (please specify) 6 (50.0%) Lack of leisure activities 5 (41.7%) Staying inside 5 (41.7%) Washing hands more 3 (25.0%) Virtual care 3 (25.0%) Limited contact with others (staff and clients)
What coping strategies did you use during the outbreak, if any?	8 (66.7%) Other (please specify) 7 (58.3%) Leisure activities (e.g., reading, games, listen to music) 3 (25.0%) Mindfulness/relaxation/meditation 2 (16.7%) Ask for help when needed 0 (0.0%) 1:1 therapy with clinicians
Did the COVID droplet and contact precautions change your relationships with clinicians on the unit?	4 (36.4%) Yes 7 (63.3%) No 1 (8.3%) Did not respond
Are there things you would like to see done differently during outbreak precautions?	7 (63.6%) Yes 3 (27.3%) No 1 (9.1%) Indifferent 1 (8.3%) Did not respond
Do the restrictions need to be adapted to better meet your needs?	10 (90.9%) Yes 1 (9.1%) No 1 (8.3%) Did not respond

being offered on the units were reduced or paused during the COVID-19 outbreak. Clinicians reported, "Most of the group programs in and off the unit has been cancelled" (survey). "Less activity/programs, if there is a program it

will be restricted" (survey). Another factor clinicians identified as affecting programming was limited access to resources to run the activities. "A lot of interventions listed we don't have enough (supplies) to give a single one to each

**Table 4: Patient and staff qualitative survey results**

Theme	Generic categories	Subcategories
Barriers to quality of care during COVID-19 outbreak precautions on forensic units	Decreased well-being and quality of life of patients on the unit	Change in living conditions The need to isolate patients in their rooms Decreased socialization among patients and with unit staff Restrictions on services outside the unit Paused progression on patient goals
	Droplet and contact (D&C) precautions	Patient disorganization Mask compliance Testing procedures
	Tension between clinical staff, as well as between patients and clinicians	Tension between patients and clinicians Tension between clinicians Tension due to increased stress and staff burnout
	Limited resources experienced by patients and clinicians	Access to PPE (personal protective equipment) Sufficient staffing Resources for patient programming
Supportive aspects of quality care during COVID-19 outbreak precautions on forensic units	Leadership barriers	Communication challenges Organizational support challenges Delays in implementation of supports Changing COVID policies
	More time spent in rooms allowing patients to participate in individual activities	Relaxation Increased attendance to ADLs (activities of daily living)
	Patients enjoyed electronic device access	Access to tablets with streaming subscription Access to electronic services
	Supportive team dynamics	Promoting teamwork and collaboration within the unit Support from other units within the hospital
Changes desired to improve quality of care in future outbreak precautions on forensic units	Patient and staff dedication to safety	Understanding the need for safety precautions Preventing spread of COVID-19
	Focus on promoting patient well-being and quality of life	Decreased use of isolation Increased access to outside services Increased activities and services
	Improved access to and cleanliness of bathrooms on the unit	Cleanliness of bathrooms Access to bathrooms/waiting times Staffing for bathrooms
	Increased access to resources for clinicians and patients	Ensuring sufficient staffing Access to Sufficient PPE
Proactive leadership		Better communication from executives to team Better communication between staff and patients

client” (survey). Clinicians shared their concerns with the restricted programming and the impact it had on their experience, stating, “We couldn’t run any in-person groups and taking on the virtual groups was challenging. Types of groups we are able to provide are not the same as we did and it’s met with a lot of disappointment from

clients” (focus group). The impact of restricted programming was felt heavily by patients on the units, some stating they “couldn’t do anything” (survey), and that the experience was “boring” (survey). One patient reflected on their disappointment with being unable to access the outdoor programming during the lockdown

period, “It was hard to not even go to the yard. If you don’t have COVID, you shouldn’t be penalized like that” (survey).

Due to the restrictions in programming on and off the units, patients and staff felt a strain on socialization as well. As individuals needed to stay within their respective rooms, the socialization between patients was greatly reduced. Clinicians noted, “some patients usually interact with each other on a regular basis which was paused during the lockdown.” and “Social life on the unit has taken a big negative impact as clients are discouraged from gathering” (survey). Another factor that impacted socialization on the units was the use of masks and face shields. Efficient and meaningful communication was impeded as it was challenging to hear through masks and face shields and nonverbal cues such as facial expressions are not possible.

Patients also felt the restriction in access to outside services and the community. Patients and clinicians both noted patients were “unable to get items (clothing or food)” and “passes are greatly restricted” (survey). This reduced access to the community has also led to paused progression to discharge for some clients. One patient explained how they were “almost going to work and then it got all pulled away. I almost had a landscaping job and COVID kept that from happening” (survey). A clinician expressed, “holding back their progress is what it felt like” (survey).

The D&C precautions themselves were seen as challenging for patients. “Client disorganization made it more difficult to adhere to basic (D&C) precaution rules without constant prompting (i.e., mask-wearing, sanitizing hands at different points while on a pass)” (survey). Many clinicians described the challenge of patients requiring constant cues to follow the D&C protocols. “Numerous times that staff has to run and tell clients to wear their masks, clients who refuse to wear masks or refuse to go to their rooms when they are in common areas—issues with clients following precautions” and “Clients are really having a hard time wearing masks and starting to see

increased frustrations, aggressions with clients not following directions with mask-wearing at this point” (focus group).

There was also a clear consensus that the testing procedures were generally a negative experience for the clients. One clinician reported, “Some clients were not prepared for what it would be like (painful), and this may have contributed to a lot of paranoia” and, “One client said, ‘it felt like they were stabbing me in the brain’” (focus group).

A common theme that arose from the data was the tension felt between clinical staff, as well as between patients and clinicians on the unit. There was “more of a divide between the allied health staff and nursing staff. Sometimes the allied health staff would advocate for a bit more choice for the clients and the nursing staff would say ‘oh no, that’s too risky’” (focus group). Another clinician went on to explain “People have a lot of really really strong opinions and its really hard to navigate. And often some people come from a safety perspective and allied health comes from a quality-of-life perspective and it results in a lot of tension and conflicts” (focus group). “Another thing that impacted it [therapeutic rapport] was the lack of consistency as well. Some people were more lenient with things like wearing masks and other people aren’t ... it totally ruined my rapport with the client because I am here enforcing it and others aren’t” (focus group). Clinicians found themselves having to focus more on enforcing the rules, which was often met with a lot of disappointment and frustration from clients. “As staff it was constantly telling them ‘Put your mask on,’ ‘No stay in your room.’ I could tell they were frustrated, and it was a long time, but as safety and as staff we had to reinforce safety of the protocols” (focus group). “I feel like the COVID police and a lot of times that’s what majority of the interaction is based on... it has been very damaging” (focus group). Patients also endorsed feeling this tension, stating, “Some of the staff were not patient enough” (survey).

Both patients and staff also identified challenges in accessing sufficient resources as an added

stressor to their experiences during the D&C precautions. Clinicians experienced reduced access and availability of PPE when the outbreaks first occurred, and staff felt as though their requests for additional PPE were being questioned. “We have to beg—feels like we are stealing” (focus group) and “Especially with how often we use it. We were being questioned as to why they required more PPE” (focus group).

Staff were also affected by reduced staffing resources “Another challenge during outbreak was being short-staffed and having a level of anxiety” (focus group). “It was extremely stressful and people calling in sick, so we were understaffed for the first little bit too. So, having to handle all of these changes and additional cleaning duties .... So that was really challenging” (focus group). Many clinicians agreed with these statements, with some of the more senior staff mentioning that they had not experienced short-staffing and its consequences this badly at any point in their careers.

The most frequently reported obstacle clinicians faced was communication challenges from leadership to front-line staff. Clinicians reported “miscommunications and lack of clarity” (focus group) and how it served as an additional divide between clients and clinicians. “Every unit is doing things differently—clients see that and hear that and ask why they are allowed to do things on other units, but they are not—this causes a lot of frustration and also ruined therapeutic rapport between them and clients” (focus group). A consistent comment throughout all three focus group sessions was that staff logistical questions regarding things like family visits, family supply drop-offs, and food services, went unanswered for too long. One clinician noted, “We had questions about if clients can receive/open parcels to them, families can drop off items for their loved ones, didn’t get anything about that” (focus group). Another clinician stated that they “had a lot of questions and things weren’t already in place—probably because this is the first time that it happened” (focus group). Inconsistent or insufficient communication about new protocols between services also led to logistical challenges, for example with mealtimes. One

clinician reported “We didn’t know dietary staff wasn’t allowed to come on during the outbreak ... messaging was inconsistent ... everything was supposed to be disposable but there were times that things weren’t, and we didn’t know what we were supposed to do with them” (focus group).

### Supportive aspects of care

The main enablers to patient care were grouped in the following generic categories:

1. more time spent in rooms allowing patients to participate in individual activities,
2. patients enjoyed electronic device access,
3. supportive team dynamics, and
4. dedication to safety.

The most-reported enabler of patient care was the dedication to the safety of both patients and clinicians. Although patients found it difficult to adhere to safety precautions and D&C protocols, they understood that it was necessary for their safety. Patients stated, “it was hard but necessary” (survey) and “we have to follow public health” (survey), demonstrating some understanding of the policies’ rationale. One patient explained, “It’s good that they did that if we all got sick it would have been more hectic. I have to learn to be more considerate, it felt like I was in trouble, but I wasn’t. I think it was good overall because we didn’t all get sick” (survey). A clinician also suggested, “because the whole unit was on lockdown it was easier for clients to understand because everyone was in their room” (survey). The implementation of D&C precautions was perceived by patients as protecting them from the virus and was positively received. Two clinicians shared how they believed clients felt about the protocols. “Patients felt more protected from contracting COVID-19 under these precautions” (survey). “Clients believed that the measures implemented will help save their lives” (survey).

Some patients benefited from having more time to spend in their rooms as it allowed them to engage in individual activities that served them. For some patients, this meant they were



able to pay more attention to their activities of daily living, such as self-care tasks, which they may normally neglect. Some patients expressed a preference for taking medications and eating meals in their room. “Everything’s done for you, you get all your meals brought to you because you can’t leave so it’s like room service” (survey). Lastly, some patients indicated staying in their rooms was not difficult for them, stating they had “more time to relax” (survey) and had “less responsibility” (survey). Some clients also endorsed the increased time in their rooms was not a big change for them. “I typically spend a lot of time in my room, so I was used to this” (survey).

Another enabler to patient care was the availability and access to electronic devices and services. Many patients completing the survey reported that having a tablet with access to a streaming subscription was the factor that “made it easier” (survey), as it gave them something to do while being isolated in their rooms. Clinicians noticed the difference as well, one stating, “once we had [the tablets] in place they really enjoyed using them. They watched a lot of Netflix and actually had something to do in their rooms” (survey). Tablets were also used for virtual programming when possible. A clinician noted, “clients were able to do some groups available virtually which was nice in their rooms” (survey). In addition to the tablets, clients also had supervised access to make phone calls, to allow for some socialization in a time where visitors were prohibited.

Supportive team dynamics was another enabler to patient care identified by clinicians throughout the outbreaks. Some units found team unity was high, and it created a supportive environment for patients. One clinician explained how “It was interesting to see how cohesively the team came together to support our clients, it did not matter what disciplines we were from, we took on the responsibility to care for our patients” (survey). Others expressed that although it was a difficult time, the team united to provide clients with the care they needed. “We did work as a team despite all the difficulties” (survey), “worked as a team to get through it” (survey) and the “team

worked well together” (survey). Furthermore, some clinicians found that there was support from other departments in the hospital. One clinician explained how they needed more PPE and other units offered them supplies.

### **Suggestions for changes to improve quality of care in the event of a future outbreak**

The main changes needed to improve patient care were grouped into four generic categories:

1. the need to focus on promoting client well-being and quality of life,
2. improved access to and cleanliness of bathrooms on the unit,
3. increased access to resources for clinicians and clients, and
4. better leadership from CAMH as an organization.

As identified in the barriers, one of the biggest challenges that clinicians and patients faced during the outbreak was the reduction in programming. Going forward, clinicians and patients suggested that there should be an increase in or maintenance of activities and services that are readily available to them during an outbreak. Both patients and clinicians noted that these services should not affect individuals who do not test positive for COVID on the units, one patient stating, “it was hard to not even go to the yard if you don’t have COVID you shouldn’t be penalized like that” (survey). Finding new ways to still engage clients on the unit should be a priority for inpatient teams. Clinicians stated that we need “ways to engage clients who are in quarantine and keep them active and goal-focused. Having daily breaks for exercise out of their room is necessary” (survey). “Accommodations to safely support client activities outside of their room (but on the unit), i.e., use of the activity room or lounges for recreation” (survey).

The confinement felt by patients was a contributing factor to reduced mental health and well-being. Patients proposed simple changes to improve their well-being, like “Being able to

leave my room at least once a day” (survey), “Somehow order out, hospital meals you don’t like you have to eat and that sucks” (survey). “They should let the patients go to the community once a day with staff for shopping so they can get what they want and bring it back” (survey). While these pose logistical challenges while adhering to D&C protocols, the needs identified could potentially be met with accommodations. A strong suggestion made by several clinicians was access to supportive counselling for patients and staff during this time to improve overall well-being. A strong statement from one occupational therapist noted the importance of supportive counselling for this group noting, “Specialized supportive counselling for what they are enduring .... This has been frustrating and traumatizing for them” (survey).

Another major theme that arose from the data was the challenges related to the washrooms on the unit. Many patients noted the need for “enhanced cleaning of the [shared] washrooms” (survey). One patient commented, “I had to wait for the bathroom to be unlocked and for water because staff were busy” (survey). Solutions were identified to address this, including “Everyone should get a call bell and staff should respond quickly because sometimes you need to go to the washroom urgently” (survey). Staff also saw the challenges, stating “We tried our best but there were times when they would use the washroom and someone else got in. If we were to do this again and we had era cleaning staff dedicated to making sure everything was cleaned thoroughly” (focus group) and “One of the barriers in my experience was we were supposed to clean washrooms every time clients would use it, and this was resource-intensive because someone had to be there for them to finish, leave the washroom so that you would clean it. .... Ideally, we would have hired outside for that position, watching the washrooms, so that we can sanitize it” (focus group).

Another direction for change identified was increased access to resources. Some staff identified the need for additional staffing specifically for ensuring sanitation of the units,

“Having an extra person assigned to sanitizing doors, sanitizing toilets, and all that would have been extremely appreciated” (focus group). While others suggested hiring more staff to ensure clients are appropriately supported, “Providing enough staffing will help to increase staff presence around the patient area to enhance reassurance and support” (survey), and “we often did not have enough staff willing to take clients out regularly to accommodate such changes” (survey). Patients also felt this same need, with one client stating, “Hire more staff” (survey). Ensuring sufficient staffing levels is not only necessary to meet the needs of clients on the unit, but also to reduce the likelihood of staff burnout during these difficult circumstances. “Working 12 hours, on an outbreak unit can be very difficult. If there is any way of increasing support with more staff, it would very much be appreciated” (survey).

Clinicians also identified a need for a streamlined process of obtaining PPE. Clinicians noted obtaining the PPE was an issue. “Shortages of PPE requiring lots of reordering” (survey). “Stores was very difficult in providing us with PPE that we needed. We had manager support but should not have to fight for PPE, biohazard boxes, etc. Someone should deliver these PPE when needed instead of us having to go to the stores” (survey).

Lastly, an overarching direction for change present in the data was the need for more proactive leadership and communication. Two communication streams needing improvement were identified:

1. between leadership and the team and
2. between staff and clients.

Clinicians identified a need for better communication among clinicians and leadership about the protocols to be implemented and followed. Clinicians requested “Increased communication about changes and supplying more resources” (survey) and “More proactive communication to staff about expectations/requirements for managing potential staff exposure” (survey). Clinicians also identified

wanting more acknowledgement and appreciation from leadership about their work during an outbreak. “Lack of appreciation for staff. Especially with some staff not receiving pandemic pay ... it created a lot of tension” (survey). “There was no celebration of the staff that had been working hard” (survey).

Clinicians also noted that they saw a need for better communication with clients about expectations and rules for lockdown, “Clearer communication to clients about expectations. Perhaps a written letter from management” (survey). One patient highlighted the importance of providing advanced warning for patients when possible, stating it would be good to “know ahead of time if we’re going to be locked down so we can prepare” (survey).

## Discussion

Our study is novel as it seeks recent patient and staff feedback of the experience of the lockdown conditions imposed by public health regulations due to COVID-19 outbreaks in minimum secure settings in old buildings with limited options for patients and staff. We found important themes emerging about how this is communicated and experienced. First, frustrations including obstruction to getting fresh air and limited bathroom access secondary to shared spaces requiring cleaning between uses were prominent. Second, access to PPE was at times difficult to achieve. Third, communication from both leadership (public health and forensic) and within the team to achieve consistency is of crucial importance. Fourth, finding other activities to replace programming and passes was important to lessening the losses imposed by the public health requirements. Due to the physical design of the inpatient forensic units, enforcement of D&C precautions posed additional challenges than more modern forensic facilities might have faced (and indeed than more modern parts of our facility).

The strengths of the study include that data triangulation through both surveys and focus groups supported data saturation, with no new data, no new themes, and no new coding

available for the units surveyed [7]. We were able to collect client and staff responses for six weeks starting one-month post unit outbreak. Collecting data soon after the outbreaks potentially minimized the impact of recall bias, improving the validity of responses [8].

The front-line reports of staff and patients in our sample echo and expand on the challenges of outbreak in other mental health settings as identified in recent studies [4,9–14]. This suggests that while the changes to care and difficulties therein are known, specific strategies and resources to overcome these difficulties are not readily available to front-line staff. Our team compiled the results of our survey with requested resources to create a tangible, easy-to-access document for clients, clinicians, and managers to support care delivery and wellness during an outbreak. We also used this document to reflect the anonymized information we received directly back to the teams, providing an opportunity for clinicians to hear the client’s experience in their own words, and for managers to hear clinicians’ experiences through direct quotes. Clear action points were included for clinicians and managers to improve the quality of care and ease of access to the various resources available to support them.

This survey of patients and staff on inpatient forensic units following a COVID-19 outbreak supports the acceptance of D&C precautions to manage spread while highlighting potential enablers, adaptations, and logistical changes that support patient care as well as patient and staff wellness during an outbreak.

There were several limitations to our study. The survey did not include any validated measures of stress. The sample was largely a convenience sample of staff and patients willing to complete the survey. The 32.4% response rate for clients and 38.5% for clinicians are low. As such, the data may be influenced by response bias. Social desirability, psychosis, and cognition may have influenced patients’ responses given the nature of the setting. Although the interviews occurred from one month after the outbreak, recall bias may have been an issue.

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## References

1. Simpson AIF, Chatterjee S, Darby P, Jones RM, Maheandiran M, Penney SR, Wilkie T. Management of COVID-19 response in a secure forensic mental health setting: Réponse à la gestion de la COVID-19 dans un établissement sécurisé de santé mentale et de psychiatrie légale. *Can J Psychiatry*. 2020 Oct;65(10):695–700. <https://doi.org/10.1177/0706743720935648>.
2. Lemieux AJ, Dumais Michaud AA, Damasse J, Morin-Major JK, Nguyen TN, Lesage A, Crocker AG. Management of COVID-19 for persons with mental illness in secure units: A rapid international review to inform practice in Québec. *Victims & Offenders*. 2020;15(7–8):1337–1360. <https://doi.org/10.1080/15564886.2020.1827111>.
3. Franke I, Büsselmann M, Streb J, Dudeck M. Perceived institutional restraint is associated with psychological distress in forensic psychiatric inpatients. *Front Psychiatry*. 2019 June 11;10:410. <https://doi.org/10.3389/fpsy.2019.00410>.
4. Tomlin J. What does social distancing mean for patients in forensic mental health settings? *Forensic Sci Int Mind Law*. 2020;1:100018. <https://doi.org/10.1016/j.fsimpl.2020.100018>.
5. Ontario Agency for Health Protection and Promotion (Public Health Ontario). *Best practices for managing COVID-19 outbreaks in acute care settings*. Toronto, ON: Queen's Printer for Ontario; 2021.
6. Elo S, Kyngäs H. The qualitative content analysis process. *J Adv Nurs*. 2008 Apr;62(1):107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>.
7. Fusch PI, Ness LR. Are we there yet? Data saturation in qualitative research. *The Qualitative Report*. 2015;20(9):1408-1416. <https://doi.org/10.46743/2160-3715/2015.2281>.
8. Crosswell AD, Lockwood KG. Best practices for stress measurement: How to measure psychological stress in health research. *Health Psychology Open*. 2020;7(2):1–12. <https://doi.org/10.1177/2055102920933072>.
9. Billings, J, Greene T, Kember T, Grey N, El-Leithy S, Lee D, et al. Supporting hospital staff during COVID-19: Early interventions. *Occupational Medicine*. 2020 July;70(5):327–329. <https://dx.doi.org/10.1093%2Foccmed%2Fkqaa098>.
10. Boland X, Dratcu L. COVID-19 and acute inpatient psychiatry: The shape of things to come. *Int J Psychiatry Clin Pract*. 2020 June;25(2):132–134. <https://doi.org/10.1080/13651501.2020.1801755>.
11. Dieset I, Løvhaug L, Selle M, Kolseth A, Smeland OB, Færden A. Lessons learned from a cross-sectional survey among patients and staff in an acute psychiatric unit during an ongoing pandemic outbreak. *Psychiatry Res*. 2021 Apr;298:113779. <https://doi.org/10.1016/j.psychres.2021.113779>.
12. Hao F, Tan W, Jiang L, Zhang L, Zhao X, Zou Y, et al. Do psychiatric patients experience more psychiatric symptoms during COVID-19 pandemic and lockdown? A case-control study with service and research implications for immunopsychiatry. *Brain Behav Immun*. 2020 Jul;87:100–106. <https://doi.org/10.1016/j.bbi.2020.04.069>.
13. Soh KC, Khanna R, Parsons A, Visa B, Ejareh Dar M. Masks in Melbourne: n inpatient mental health unit's COVID-19 experience. *Australas Psychiatry*. 2021 Apr;29(2):240–241. <https://doi.org/10.1177/1039856220968394>.
14. Wu D, Jiang C, He C, Li C, Yang L, Yue Y. Stressors of nurses in psychiatric hospitals during the COVID-19 outbreak. *Psychiatry Res*. 2020 Jun;288:112956. <https://doi.org/10.1016/j.psychres.2020.112956>.

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# Emotional Content Analysis Among People With Psychopathy During Emotional Induction by the International Affective Picture System

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The emotional processes within people with psychopathy have been thoroughly investigated. Although content analysis is an interesting area for evaluating emotional characteristics, few data exist concerning the speech content of people with psychopathy in response to affective and neutral images. Our study population included male forensic inpatients ( $n = 47$ ) from *Centre Régional de soins Psychiatrique, Les Marronniers, Tournai, Belgium*. According to their total score, as measured by the Psychopathy Checklist—Revised (PCL-R), the inpatients were divided into three groups: Psychopath ( $n = 24$ , PCL-R score of  $\geq 25$ ), Intermediate ( $n = 12$ , PCL-R score from 15.0 to 24.9), and Nonpsychopath ( $n = 11$ , score of  $\leq 14.9$ ). Using Tropes analyses and EMOTAIX scenario tools, we examined each narrative's emotional characteristics. We tested the hypothesis that people with psychopathy report fewer emotional words on all International Affective Picture System images, particularly on negative-valence images. Generally, our results do not support this hypothesis, that people with psychopathy report fewer emotional words on all images, but rather suggested a specific discordance in the verbal emotional treatment (exclusively PCL-R Interpersonal factor) but not in terms of the subjective evaluation. Moreover, this interpersonal factor was positively correlated with the self-referring pronouns (i.e., I and me) setting, whereas the PCL-R Social Deviance factor was positively correlated with action verbs. Speech outputs of people with psychopathy present specificities in terms of emotional content and verbal setting. The results are congruent with the notion that psychopathy combines both functionality and subtle impairment.

**Key words:** Psychopathy, emotions, International Affective Picture System, IAPS, content analysis

## Introduction

Psychopathy is a complex clinical construct defined by a mix of interpersonal, affective, and behavioural characteristics, including egocentricity, manipulativeness, callousness, irresponsibility, relational instability, impulsiveness, lack of empathy, anxiety, remorse or

guilt, and poor self-control expressed in particular through antisocial behaviour that is not necessarily of a criminal nature [1,2]. Verbal behaviours, then, constitute a choice target for identifying psychopathic characteristics above and beyond any judicial and medicolegal information [3]. Speech analysis constitutes

an excellent means of assessing normal and pathological psychological functioning. Indeed, language is a marker of an individual's emotional state, social identity, cognitive style [4,5], defensive style [6], personality traits [7–9], more generally, physical and psychological state [10]. The makers has been demonstrated among a variety of problems: psychiatric disorders [11], psychotic disorders [6,12], autism spectrum disorders [13], and anxiety and depression disorders [7,14,15]. However, there has been to date very little research on personality disorders using speech analysis.

### *Psychopathy and language*

Among inmates with psychopathy assessed with the Psychopathy Checklist—Revised (PCL-R) [1], written and spoken language was found to abide by elementary grammatical rules regarding phonology, syntax, morphology, and semantics [16,17]. In other words, people with psychopathy did not use a specific language but rather adapted it to their circumstances depending on whether or not they were in a prison setting [17]. In a study involving inmates with psychopathy, as determined by the PCL-R, and without psychopathy, Brinkley et al. [18] asked participants to relate two memories, one that evoked fear and the other, anger. They demonstrated, through cohesion analysis, that people with psychopathy used fewer semantic ties to render their narratives cohesive and coherent; however, when they did use such ties, their speech appeared adapted to the circumstances.

These researchers also underscored the importance of taking anxiety levels into account, given that people with high levels had greater difficulty in coming up with coherent stories, compared with people with low levels. They surmised that these findings might be explained by the effect of emotional content. Adding a neutral condition would have allowed for testing this hypothesis. Years later, in a study using a semantic priming and interference task, Brinkley et al. [16] again stressed the importance of using both emotional and neutral stimuli.

Regarding verbal content, Endres [3] underscored the egocentric nature of the narratives produced by inmates with psychopathy, as well as their concerns regarding power and resisting the power of others, their use of obscenity, and the prevalence of dysphoric mood states. Although these elements are characteristic of psychopathy, they are not specific to this disorder. More recently, Hancock et al. [19] used content analysis to examine the narratives of inmates who had committed homicide, with psychopathy defined on the basis of a PCL-R total score of equal to or greater than 25. Their results showed that these people described powerful emotional events (crimes) idiosyncratically. Unlike the narratives of people without psychopathy who have committed homicide, the narratives of the inmates contained more causal relationships, more references to primitive physiological needs (focus on self-preservation and bodily needs) corresponding to the lowest tier in Maslow's [20] pyramid of needs. Their speech presented little content regarding social needs (family, religion and [or] spirituality), more tangential hesitation, and a greater emotional detachment. In fact, participants with a high interpersonal factor score used fewer intense emotional words, particularly positive words, and spoke in the past tense more often. More recently, Le et al. [21] generally confirmed these results in a study based on the content analysis of PCL-R interviews. These people with psychopathy showed more disfluency (i.e., hesitation), made greater use of personal pronouns, particularly those in the first-person singular, spoke in shorter sentences, were egocentric, and did not exhibit much emotion.

Finally, people with psychopathy reported more fringe details when describing their homicide (e.g., what they ate that day), and demonstrated greater disfluency, compared to people without psychopathy [19]. This converged with earlier results reported by Christianson et al. [22], who underscored that, unlike inmates without psychopathy, inmates with psychopathy did not provide a greater number of central details regarding negative stimuli.

However, the inmates did not differ regarding the number of central and peripheral details reported regarding neutral stimuli.

In the end, this difficulty in processing information related to emotional processes seems to depend, in fact, as much on the people with psychopathy's perception of emotional stimuli as on the task at hand. In this regard, Hancock et al. [19] recognized it was difficult to know whether homicidal inmates with psychopathy presented an emotional impairment, given the difficulty of determining baseline levels for emotional content, or whether narrating a homicidal act was an unusual task. For this reason, these researchers recommended that future studies examine the speech characteristics of people with psychopathy, both for emotional and for unemotional events. In their opinion, participants' responses to emotional stimuli had to be considered both objectively and subjectively [23,24].

### *Purpose of study*

Against this background, we undertook a study to analyze the speech of people with psychopathy in response to images intended to elicit positive and negative emotions, and also to images with neutral valence corresponding to an unemotional situation [18,19]. Following Hancock et al. [19], we defined the psychopathic group based on a PCL-R total score of equal to or greater than 25. Our primary hypothesis was that people with psychopathy would use fewer emotional words across all images, and more specifically in response to images with a negative valence. This hypothesis was tested using the EMOTAIX scenario [25], which also allowed verifying whether people with psychopathy demonstrated more impassivity and less surprise in response to emotional stimuli, compared with people without psychopathy. As did Brook et al. [23], we expected to find no difference in scores between people with and without psychopathy regarding their subjective evaluation of International Affective Picture System (IAPS) images [26]. Moreover, based on the study by Le et al. [21], we hypothesized that, given

egocentricity and narcissism [3,27], people with psychopathy would use significantly more personal pronouns (first person), compared with people without psychopathy.

## **Method**

### *Participants and setting*

The sample consisted of forensic male inpatients ( $n = 47$ ) divided into three groups according to PCL-R total score: Psychopath ( $\geq 25$ ;  $n = 24$ ), Intermediate (15.0–24.9;  $n = 12$ ), and Nonpsychopath ( $\leq 14.9$ ;  $n = 11$ ). Descriptive analysis of PCL-R total scores by age, full-scale IQ score [28], social desirability [29], and length of hospital stay by forensic groups are given in Table 1. The three groups do not differ on all variables except for social desirability. Indeed, the mean total score of the nonpsychopath group was significantly higher than that of the psychopath group,  $U = 42.50$ ,  $p = .001$ . However, social desirability total score was not associated with the dependent variables (EMOTAIX and Tropes scores). The forensic group broke down by type of offences as follows: sexual,  $n = 27$  (60.00%), nonsexual violent,  $n = 20$  (44.40%), and nonsexual, nonviolent,  $n = 18$  (40.00%). No inter-group difference emerged between the three groups.

### *Main instruments*

#### **Psychopathy Checklist**

The PCL-R comprises two main factors and four facets. Factor 1 is referred to as the interpersonal factor and covers affective, interpersonal, and narcissistic elements. It breaks down into Facet 1, Interpersonal, and Facet 2, Affective. Factor 2 is known as the Social Deviance factor and focuses on the propensity for chronic antisocial behaviour. It breaks down into Facet 3, Lifestyle, and Facet 4, Antisocial. The PCL-R is composed of 20 items rated on a three-point scale where "0" indicates that the item does not apply, "1" that it applies only in part, and "2" that it applies in full. It thus has a total score range of 0 to 40. The instrument was administered as prescribed by its creator, Robert D. Hare. Information for the purposes

**Table 1: Descriptive analysis of psychopathy scores, age, full-scale IQ score, social desirability total score, and length of hospital stay by level of psychopathy**

Variable	Level of Psychopathy					
	Nonpsychopath <i>n</i> = 11		Intermediate <i>n</i> = 12		Psychopath <i>n</i> = 24	
	Mean	SD	Mean	SD	Mean	SD
Total score	9.78	3.21	19.58	3.50	28.57	3.36
Factor 1	4.86	2.91	8.67	2.90	11.31	2.17
Factor 2	4.00	3.11	9.21	2.41	14.33	2.91
Interpersonal	1.41	1.36	3.41	1.63	5.31	1.88
Affective	3.45	2.24	5.68	1.27	6.02	1.49
Lifestyle	2.20	1.69	4.95	1.98	7.25	1.74
Antisocial	1.67	1.79	3.75	2.60	7.58	2.04
Age	50.57	8.96	47.64	9.75	43.82	10.69
Full-scale IQ score	75.82	21.13	76.17	17.95	78.81	14.53
Social desirability total score	23.18	3.95	19.83	5.34	18.33	3.91
Length of hospital stay, years	13.37	9.11	9.52	4.95	10.71	9.27

SD = standard deviation

of the evaluation was culled from two sources, namely, criminal, social, psychological, and psychiatric records, and semi-structured interviews. In Belgium, the PCL-R was subjected to psychometric evaluation in a prison setting [30], was used with a forensic psychiatric population [31], and was the focus of a predictive validation study [32,33]. We used the French translation of the instrument [34] in this study, and set the cut-off score at 25, as suggested for European countries [35,36]. Pham [30] evaluated the psychometric properties of the PCL-R with 103 Belgian inmates. The fidelity coefficients obtained were excellent: .91, .93, and .96. Internal consistency (Cronbach alpha) also proved to be good: .86 for total score, .86 for Factor 1 score, and .85 for Factor 2 score.

## Procedure

The participants in this exploratory study were all recruited, on a voluntary basis, and consented to take part in the research in accordance with the ethical principles of the Helsinki declaration and the right to the protection of privacy as stipulated under the Belgian law of July 30, 2018, concerning the processing

of personal data. Moreover, this study was approved by the research ethics board of the Centre Régional de soins Psychiatrique [Regional Psychiatric Centre (RPC)], also known as Les Marronniers. All participants signed an informed consent form specifying the purpose of the study and guaranteeing anonymity and confidentiality. The participants were evaluated individually at least one month after admission to the facility. Evaluations were carried out by psychologists in Admission Services, duly trained in PCL-R, where the focus is on evaluating patients in a general way, with no specific therapeutic aim. The emotional task and the self-reported questionnaires were carried out by the team at the Centre de Recherche en Défense Sociale.

Participants were given the following instructions:

*The aim of our research is to examine how people react emotionally to images. You will be shown images and we would like you to tell us spontaneously how they make you feel. Then, we will ask you to evaluate what you felt in the face of each image by completing*



*a questionnaire, the Self-Assessment Manikin (SAM). You will be required to gauge the emotional valence, (i.e., pleasure/displeasure) and arousal (i.e., intensity), two key dimensions of any affective experience.*

Participants were recorded using a Philips PC Headset SHM2000. They were debriefed following the study.

## Stimuli

### *International Affective Picture System and Self-Assessment Manikin*

The pictures used ( $n = 18$ ) were taken from the IAPS database [26]. The IAPS comprises a set of positive, negative, and neutral pictures depicting scenes intended to evoke a range of emotions, characterized by varying degrees of valence, arousal, and control. Among the 18 images selected, six had a positive valence (low intensity: 2,370 and 5,760; moderate intensity: 5,830 and 2,311; high intensity: 4,250 and 8,185), six had a neutral valence (low intensity: 5,740 and 7,020; moderate intensity: 1,390 and 1,101; high intensity: 5,940 and 1,321), and six had a negative valence (low intensity: 9,220 and 9,331; moderate intensity: 3,230 and 3,220; high intensity: 3,400 and 9,250). To avoid bias related to presentation effects, the images were presented at random to control the effect of the emotional feeling of one image on the next. Each image was presented for one minute.

After the presentation of each image, participants were asked to express their feelings. After completing all 18, they were asked to complete a self-administered questionnaire, the SAM, to evaluate the images in terms of valence (i.e., pleasure/displeasure) and arousal (i.e., intensity), two key dimensions of affective experience. These were rated on two 9-point Likert scales, ranging from 1 (lowest level of pleasure/arousal) to 9 (highest level).

## Content analysis

To examine the emotional characteristics of the narratives, we used the EMOTAIX Scenario (version V1\_2) [37], driven by the

Tropes (version 8) linguistic analysis software. EMOTAIX allows for analyzing the emotional lexicon, organized as a dictionary, with 2,014 references (semantic categories) and 4,921 words. It allows for identifying, categorizing, and automatically counting of the emotional lexicon contained in an oral and written production of any length. This lexicon (literal and figurative) refers to the following psychological states: emotions, feelings, mood, emotional personality, and temperament [25]. In addition to analyzing emotional content, we examined Style and Setting with the Tropes software. Tropes distinguishes four text styles: Argumentative, Narrative, Enunciative, and Descriptive. Tropes also distinguishes four verbal settings: Dynamic/Action, In the Real, Involving the Narrator, and Involving "I."

## Data analysis

The analyses were run on the Statistical Product and Service Solutions (SPSS), version 25.0 (IBM Corp., Armonk, NY, USA) program. After failing to normalize the data, comparisons were conducted with nonparametric tests on account of the abnormal distribution of the data, as verified by the Shapiro–Wilk test.

Accordingly, inter-group comparisons were carried out using the Kruskal–Wallis test (when comparing three groups) and the Mann–Whitney  $U$  test (when comparing two groups) on age, social desirability total score, full-scale IQ score, and length of stay. The chi-square ( $\chi^2$ ) test and the Fisher exact test statistic were used to compare groups on offences.

We first compared groups (nonpsychopath and psychopath) with the Mann–Whitney  $U$  test on

1. the EMOTAIX scores (total number of words expressed, Positive and Negative Emotion, Impassibility, and Surprise categories),
2. the Tropes scores (Style and Setting) and
3. the SAM scores (Valence and Intensity).

These analyses were conducted according to valence (Positive, Neutral, and Negative) and

intensity (Low, Moderate, and High) of the IAPS images. The Dunn–Bonferroni procedure was used to hold the maximum familywise (FW) type I error rate for each set of dependent variable comparisons at Cronbach  $\alpha$ FW = .10 [38]. Because there were nine (IAPS: 3 Valence  $\times$  3 Intensity) comparisons in each set, the type I (T) error rate per individual test was set at Cronbach  $\alpha$ T = .10/9 = .01. Otherwise, the .05 threshold will be used to calculate comparisons of total scores.

Effect sizes ( $r = z/\sqrt{n}$ ) are reported for only two-by-two comparisons [39]. Cohen  $r$  criterion was used [40]: .10 = small, .30 = medium, .50 = large. These analyses were run on 35 participants, that is, all but the intermediate subgroup.

Then, we performed correlational analyses between the EMOTAIX scores (total number of words expressed, total number of emotional words to total number of words, Positive and Negative Emotion, and Impassibility and Surprise categories), the Tropes scores (Style and Setting), the SAM scores (Valence and Intensity), and the PCL-R total score and factor scores. We computed partial correlations on the factors by further controlling the respective effects of the PCL-R factors. For correlations, the .05 significance threshold was chosen. Effect size was calculated using Cohen's  $r$  criterion [40] as follows: .10 = small, .30 = medium, and .50 = large.

In a continuum perspective, these analyses were run on 47 participants, including the intermediate subgroup.

## Results

### *Groups compared on EMOTAIX and SAM scores*

People with psychopathy did not express fewer negative emotions and more impassibility than people without psychopathy. Indeed, the two groups did not differ on total number of words expressed during tasks and on the EMOTAIX scores for all images (negative,

neutral, and negative) (Table 2). People with psychopathy express more emotional words, to total number of words, for all images, than people without psychopathy. Specifically, the psychopath group reported significantly more positive emotions to total number of words for all images, and for positive valence images, especially for high-intensity images ( $U = 56.50$ ,  $p = .006$ ,  $r = .45$ ).

Regarding the SAM valence scores, the psychopath group evaluated the positive valence images more positively than the nonpsychopath group, regardless of the intensity of the images (Moderate,  $U = 48.50$ ,  $p = .002$ ,  $r = .52$ ; High,  $U = 47.00$ ,  $p = .002$ ,  $r = .55$ ). Moreover, the psychopath group evaluated the negative-valence images more negatively than the nonpsychopath group, especially low-intensity images ( $U = 29.50$ ,  $p < .001$ ,  $r = .62$ ). Regarding the SAM Intensity scores, the psychopath group evaluated emotional images more intensely than the nonpsychopath group, especially negative-valence images. The same trend is observed for the moderate-intensity images ( $U = 58.50$ ,  $p = .008$ ,  $r = .45$ ).

Regarding correlation analyses (Table 3), we observed a positive correlation, with a moderate size effect, between the PCL-R Interpersonal factor and total number of words expressed, especially about negative emotions for positive valence images and positive emotions for negative-valence images. We found the opposite pattern for the PCL-R Social Deviance factor. This proved negatively correlated, with a moderate size effect, with total number of words expressed. Similarly, it correlated negatively, with a moderate size effect, with positive emotions for negative-valence images, and with negative emotions for positive valence images. Finally, this factor correlated negatively, with a small size effect, with Surprise emotions for neutral valence images.

We observed a positive correlation, with a moderate size effect, between the PCL-R total score and the SAM Intensity score for

**Table 2: Statistics for Nonpsychopath and Psychopath groups compared on EMOTAIX scores (total number of emotional words) and Self-Assessment Manikin (SAM) scores (Valence and Intensity) for all images, and positive, negative, and neutral images**

Variable	Nonpsychopath <i>n</i> = 11		Psychopath <i>n</i> = 24		Statistics		
	Mean	SD	Mean	SD	<i>U</i> <sup>a</sup>	<i>p</i>	<i>r</i>
All images							
Number of words	334.18	334.95	403.88	482.3	—	—	—
Number of emotional word	0.05	0.04	0.12	0.18	74.50	.040	.35
Number of positive emotion words	0.02	0.02	0.06	0.07	71.00	.030	.37
Number of negative emotion words	0.03	0.02	0.06	0.12	—	—	—
Number of surprise words	0.00	0.00	0.00	0.00	—	—	—
Number of impassibility words	0.00	0.00	0.00	0.00	—	—	—
SAM, Valence	81.00	17.35	89.87	11.64	—	—	—
SAM, Intensity	61.10	23.78	93.00	35.04	59.00	.008	.44
Positive images							
Number of positive emotion words	0.04	0.04	0.12	0.17	65.00	.016	.40
Number of negative emotion words	0.00	0.00	0.01	0.03	—	—	—
SAM, Valence	10.82	6.43	33.42	20.26	57.50	.007	.45
SAM, Intensity	21.27	9.72	32.58	16.27	—	—	—
Negative images							
Number of positive emotion words	0.01	0.01	0.01	0.02	—	—	—
Number of negative emotion words	0.01	0.01	0.01	0.02	—	—	—
SAM, Valence	46.18	6.97	27.12	16.62	44.00	.001	.53
SAM, Intensity	14.27	12.24	31.46	15.47	54.00	.005	.47
Neutral images							
Number of positive emotion words	0.02	0.03	0.05	0.06	—	—	—
Number of negative emotion words	0.02	0.04	0.07	0.17	—	—	—
SAM, Valence	24.00	9.13	29.33	8.25	—	—	—
SAM, Intensity	25.55	7.59	28.96	11.22	—	—	—

<sup>a</sup> Mann–Whitney *U* test

positive valence images and negative-valence images. We also observed a positive correlation, with a moderate size effect, between the SAM valence score for positive valence images and the PCL-R total score and

the PCL-R Interpersonal factor. Conversely, we found a negative correlation, with a large effect size, between the PCL-R total score and the SAM valence score for negative-valence images.

**Table 3: Correlation analyses between Psychopathy scores, Self-Assessment Manikin (SAM) scores (Valence and Intensity), EMOTAIX and Tropes scores**

Variable	Total score, $r_s$	Factor 1, $r_p$	Factor 2, $r_p$
<b>All images</b>			
Number of words	.006	.340 <sup>a</sup>	-.356 <sup>a</sup>
Positive emotions	.219	.239	-.140
Negative emotions	.134	.230	-.222
SAM, Valence	.273	.265	-.007
SAM, Intensity	.415 <sup>b</sup>	.215	.143
Dynamic/Action setting	.166	-.122	.364 <sup>a</sup>
Involving, "I" setting	.252	.427 <sup>b</sup>	-.258
<b>Positive images</b>			
Positive emotions	.246	.158	-.061
Negative emotions	-.085	.317 <sup>a</sup>	-.331 <sup>a</sup>
SAM, Valence	.473 <sup>b</sup>	.317 <sup>a</sup>	.231
SAM, Intensity	.348 <sup>a</sup>	.226	.087
Dynamic/Action setting	-.043	-.325 <sup>a</sup>	.362
Involving, "I" setting	.244	.420 <sup>b</sup>	-.159
<b>Negative images</b>			
Positive emotions	.072	.368 <sup>a</sup>	-.320 <sup>a</sup>
Negative emotions	.123	.152	-.126
SAM, Valence	-.509 <sup>b</sup>	-.295	-.261
SAM, Intensity	.423 <sup>b</sup>	.255	.183
Dynamic/Action setting	.202	-.032	.344 <sup>a</sup>
Involving, "I" setting	.173	.385 <sup>a</sup>	-.279
<b>Neutral images</b>			
Positive emotions	.178	.216	-.133
Negative emotions	.127	.228	-.239
SAM, Valence	.252	.274	-.033
SAM, Intensity	.100	-.006	.067
Dynamic/Action setting	.167	.076	.114
Involving, "I" setting	.193	.413 <sup>b</sup>	-.301

<sup>a</sup>  $p < .05$ ; <sup>b</sup>  $p < .01$

$r_s$  = Spearman correlation;  $r_p$  = partial correlation

### *Groups compared on Tropes Style and Setting score and correlation analysis between PCL-R and Tropes Setting score*

The groups did not differ on the Style and Setting score. Conversely, we observed a positive correlation, with a moderate effect size, between the PCL-R Interpersonal factor score and the Involving "I" Setting score for all images, positive valence images, negative-valence images, and neutral valence images. Moreover, a positive correlation, with a moderate effect size, emerged between PCL-R Social Deviance factor score and Dynamic, Action Setting score for all images, positive-valence images and negative-valence images.

## **Discussion**

Psychopathy is a clinical construct defined by a mix of interpersonal, affective, and behavioural characteristics [1,2]. Language constitutes an excellent means of studying these features [3,19,21]. Through content analysis, previous research had shown people with psychopathy to be inexpressive and emotionally detached. However, the heterogeneity of experimental designs made it difficult to generalize results, owing to the absence of a neutral, unemotional condition [18,19] or of an objective and a subjective measure of emotional stimuli [23,24]. To remedy these shortcomings, we analyzed the speech of people with psychopathy in response to images intended to elicit positive and negative emotions and to images with neutral valence corresponding to an unemotional situation [18,19].

Overall, our results do not support the hypothesis that people with psychopathy use fewer emotional words in response to negative-valence images, are more impassive, and express less surprise. Subjectively, the psychopath group evaluated the negative-valence images more negatively (SAM valence) and more intensely (SAM Intensity)

than the nonpsychopath group. Regarding word production, these people expressed significantly more positive emotional words relative to the total number of words used, in response to all images and positive valence images. This is congruent with findings of previous studies that demonstrated the absence of an emotional impairment in connection with positive valence emotional stimuli [41,42].

Conversely, we find difficulties specific to psychopathic interpersonal functioning related to the expression of incongruent emotions in response to negative or positive stimuli. Indeed, the PCL-R Interpersonal factor correlated positively with negative emotions for positive valence images and with positive emotions for negative-valence images. This discordance was not found by Hancock et al. [19], who had pointed out the use of emotionally less positive and intense language. However, we are loath to compare our results with those of their study, where participants were asked to narrate a homicide and express how they felt about it. We have no information on how psychopathic people perceived their crime emotionally. Hancock et al. [19] underscored the necessity of comparing the narratives of people with and without psychopathy based on standardized material, such as video clips of variable intensity, as we did in this study.

However, this result is not found on a subjective evaluation. Indeed, we also observed a positive correlation between the SAM valence score for positive valence images and the PCL-R Interpersonal factor. Therefore, it seems that there is a difference in the treatment of emotional information between subjective assessment and emotional response. Brook et al. [23] previously pointed out this dissociation between the physiological dysfunctions of emotional responses and the apparently “normal” subjective judgment of people with psychopathy. According to these authors, these people present a specific dysfunction in the treatment of negative emotional information about verbal emotional output but not about the subjective evaluation of the valence of negative emotional stimuli.

The inverse correlational pattern for the PCL-R Social Deviance factor is congruent with the findings of Hick and Patrick [43], who demonstrated an opposition between the expression of emotional distress and the PCL-R factors. Indeed, the interpersonal factor correlated negatively with the expression of emotional distress, whereas the Social Deviance factor correlated positively. On the whole, our results confirm the importance of considering the crossover suppressor effects of the PCL-R factors on the emotional variables [43].

Next, we analyzed how people with psychopathy expressed themselves in terms of verbal setting and style. We hypothesized that, owing to their characteristic egocentricity and narcissism [3,19], people with psychopathy would use significantly more personal pronouns (first person), compared with people without psychopathy [21]. This result was not significant; however, the PCL-R Interpersonal factor was positively correlated with the self-referring pronouns, regardless of emotional valence. The use of self-referring pronouns can be considered as a measure of egocentric narcissism [44]. However, although first-person singular pronouns may reflect egocentricity, they are not the direct expression of deceptiveness, but rather of honesty [45]. This self-centredness is found among depressed people, and is associated with negative thoughts of which the subject has an accrued awareness [46,47]. Whereas depressed people express little or no self-centredness when they are actors in positive situations [46], people with psychopathy, owing to their narcissism, tend to maintain a positive view of themselves even if it means being aggressive with others [48]. Consequently, how we interpret the use of personal pronouns requires that we consider the global linguistic context relative to personality traits.

We found a positive correlation between the Social Deviance factor and the Dynamic, Action setting. The Social Deviance score correlated with action verbs, both for positive and negative images. This result is congruent with the behavioural characteristics of this factor (e.g., impulsiveness, thrill-seeking,

poor self-control) and the implication of motor responses with action verbs [49].

### *Limitations and future directions*

Our results provide evidence of a subtle abnormality in affective responding and language use specific to people with psychopathy, focused not on the quantity of emotions expressed but on the adequacy of the emotional response that would depend on the interpersonal factor score. Therefore, it would be interesting to compare manipulative and aggressive profiles, which are the two main variants of psychopathy [50].

Despite the joint use of an objective evaluation of verbal output and a subjective evaluation of the images used, we question the relevance of using emotional induction by way of IAPS images. In the future, we believe it would be preferable to use autobiographical memories directly identified as important for each participant; that is, ecological material with a high degree of personal involvement, to attenuate any motivational bias. We observed that action verbs were associated with the Social Deviance factor and, more generally, with behavioural responses. Consequently, it would be worthwhile to carry out more refined linguistic analyses by examining the semantic polarity (affirmative, negative) of speech given that behavioural responses depend on this [51]. The small size of our groups and the presence of nonnormal distributions prompted us to undertake non-parametric analyses. Consequently, we must consider our results as merely exploratory.

### **Conclusion**

The speech output of people with psychopathy in forensic settings presents specific characteristics about emotional content and verbal setting. In keeping with our earlier research based on self-reported data [51,52], and the decoding of facial expressions [53], these people would seem to be much more functional and much less impaired at the emotional level than anticipated. Psychopathy, it would seem, stems from a combination of functionality and subtle impairment [54].

**Conflict of Interest:** none

### **References**

1. Hare RD. *The Hare Psychopathy Checklist—Revised (2nd ed.)*. Toronto (ON): Multi-Health System; 2003.
2. Neumann CS, Hare RD, Newman JP. The super-ordinate nature of the Psychopathy Checklist—Revised. *J Pers Disord*. 2007;21(2):102-117.
3. Endres J. The language of the psychopath: Characteristics of prisoners' performance in a sentence completion test. *Crim Behav Ment Health*. 2004;14:214-226.
4. Pennebaker JW, Graybeal A. Patterns of natural language use: Disclosure, personality, and social integration. *Curr Dir Psychol Sci*. 2001;10:90-93.
5. Pennebaker JW, Mehl MR, Niederhoffer KG. Psychological aspects of natural language use: Our words, our selves. *Annl Rev Psychol*. 2003;54:547-577.
6. Oxman TE, Rosenberg SD, Schnurr PP, Tucker GJ. Somatization, paranoia, and language. *J Commun Disord*. 1988;21:33-50.
7. Chung CK, Pennebaker JW. Revealing dimensions of thinking in open-ended self-descriptions: An automated meaning extraction method for natural language. *J Res Pers*. 2008;42:96-132.
8. Oberlander J, Gill AJ. Language with character: A stratified corpus comparison of individual differences in e-mail communication. *Discourse Processes*. 2006;42:239-270.
9. Schwartz HA, Eichstaedt JC, Kern ML, Dziurzynski L, Ramones SM, Agrawal M, Agrawal M, Shah A, Kosinski M, Stillwell D, Seligman MEP, Ungar LH. Personality, gender, and age in the language of social media: The open-vocabulary approach. *PLoS One*. 2013;8(9):e73791.
10. Campbell RS, Pennebaker JW. The secret life of pronouns: Flexibility in writing style and physical health. *Psychol Sci*. 2003;14:60-65.
11. Junghaenel DU, Smyth JM, Santner L. Linguistic dimensions of psychopathology: A quantitative analysis. *J Soc Clin Psychol*. 2008;27:36-55.

12. Oxman TE, Rosenberg SD, Schnurr PP, Tucker GJ, Gala G. The language of altered states. *J Nerv Ment Dis.* 1988;176(7):401-408.
13. Losh M, Gordon PC. Quantifying narrative ability in autism spectrum disorder: A computational linguistic analysis of narrative coherence. *J Autism Dev Disord.* 2014;44(12):3016-3025.
14. Anderson B, Goldin PR, Kurita K, Gross JJ. Self-representation in social anxiety disorder: Linguistic analysis of autobiographical narratives. *Behav Res Ther.* 2008;46(10):1119-1125.
15. Sonnenschein AR, Hofmann SG, Ziegelmeier T, Lutz W. Linguistic analysis of patients with mood and anxiety disorders during cognitive behavioral therapy. *Cogn Behav Ther.* 2018;47(4):315-327.
16. Brinkley CA, Schmitt WA, Newman JP. Semantic processing in psychopathic offenders. *Pers Individ Dif.* 2005;38(5):1047-1056.
17. de Almeida Brites J, Ladera V, Perea V, García R. Verbal functions in psychopathy. *Int J Offender Ther Comp Criminol.* 2015;59(14):1536-1549.
18. Brinkley CA, Newman JP, Harpur TJ, Johnson MM. Cohesion in texts produced by psychopathic and nonpsychopathic criminal inmates. *Pers Individ Dif.* 1999;26(5):873-885.
19. Hancock JT, Woodworth MT, Porter S. Hungry like the wolf: A word-pattern analysis of the language of psychopaths. *Legal Criminol Psychol.* 2013;18:102-114.
20. Maslow AH. A theory of human motivation. *Psychol Rev.* 1943;50(4):370-396.
21. Le MT, Woodworth M, Gillman L, Hutton E, Hare RD. The linguistic output of psychopathic offenders during a PCL-R interview. *Crim Justice Behav.* 2017;44(4):551-565.
22. Christianson S-Å, Forth AE, Hare RD, Strachan C, Lidberg L, Thorell L-H. Remembering details of emotional events: A comparison between psychopathic and nonpsychopathic offenders. *Pers Individ Dif.* 1996;20:437-443.
23. Brook M, Brieman CL, Kosson DS. Emotion processing in Psychopathy Checklist—assessed psychopathy: A review of the literature. *Clin Psychol Rev.* 2013;33(8):979-995.
24. de Almeida Brites J. The language of psychopaths: A systematic review. *Aggress Violent Behav.* 2016;27:50-54.
25. Piolat A, Bannour R. EMOTAIX : Un scénario de Tropes pour l'identification automatisée du lexique émotionnel et affectif. *Année Psychol.* 2009;109(4):655-698.
26. Lang PJ, Bradley MM, Cuthbert B. *International Affective Picture System (IAPS): instruction manual and affective ratings.* Technical Report A-4. The Center for Research in Psychophysiology. University of Florida; 1999.
27. Hancock J, Woodworth MT, Morrow R, McGillivray H, Boochever R. Assessing credibility through text: A preliminary analysis for identifying psychopathy. Proceedings of the Rapid Screening Technologies, Deception Detection and Credibility Assessment. In: *Symposium of the 45th Hawaii International Conference on System Sciences*; 2012; Maui (HI).
28. Wechsler D. *Manuel de l'Echelle d'Intelligence de Wechsler pour Adultes—3e éd* [Manual for the Wechsler Adult Intelligence Scale—3rd ed]. Grégoire, J, translator. Paris (FR): Les Editions du Centre de Psychologie Appliquée (ECPA); 2000.
29. Crowne DP, Marlowe D. A new scale of social desirability independent of psychopathology. *J Consult Psychol.* 1960;24(4):349-354.
30. Pham TH. Évaluation psychométrique du questionnaire de la psychopathie de Hare auprès d'une population carcérale belge [Psychometric evaluation of the Hare Psychopathy Questionnaire in a Belgian prison population]. *Encéphale.* 1998;24(5):435-441.
31. Pham TH, Remy S, Dailliet A, Lienard L. Psychopathie et évaluation des comportements violents en milieu psychiatrique de sécurité [Psychopathy and evaluation of violent behavior in a psychiatric security milieu]. *Encéphale.* 1998;24(3):173-179.
32. Jeandarme I, Edens JF, Habets P, Bruckers L, Oei K, Bogaerts S. PCL-R field validity in prison and hospital settings. *Law Hum Behav.* 2017;41(1):29-43.

33. Pham TH, Ducro C, Marghem B, Réveillère C. Evaluation du risque de recidive au sein d'une population de delinquants incarceres ou internes en Belgique francophone [Prediction of recidivism among prison inmates and forensic patients in Belgium]. *Annales Medico-Psychologiques*. 2005;163(10):842-845.
34. Côté G, Hodgins S. *L'Echelle de Psychopathie de Hare—Révisée—Manuel* [The Hare Psychopathy Checklist—Revised—Manual]. Toronto (ON): Multi-Health System; 1996.
35. Cooke DJ, Michie C. Psychopathy across cultures: North America and Scotland compared. *J Abnorm Psychol*. 1999;108(1):58-68.
36. Hare RD, Clark D, Grann M, Thornton D. Psychopathy and the predictive validity of the PCL-R: An international perspective. *Behav Sci Law*. 2000;18(5):623-645.
37. Piolat A, Bannour R. An example of text analysis software (EMOTAIX-Tropes) use: The influence of anxiety on expressive writing. *Curr Psychol Lett*. 2009;25(2):1-21.
38. Hart SD, Hare RD. Discriminant validity of the Psychopathy Checklist in a forensic psychiatric population. *Psychol Assess*. 1989;1(3):211-218.
39. Field A. *Discovering statistics using IBM SPSS statistics*. Thousand Oaks (CA): Sage; 2013.
40. Cohen J. A power primer. In: Kazdin AE, editor. *Methodological issues and strategies in clinical research (3rd ed.)*, Washington (DC): American Psychological Association; 2003:427-436.
41. Habel U, Kühn E, Salloum JB, Devos H, Schneider F. Emotional processing in psychopathic personality. *Aggress Behav*. 2002;28(5):394-400.
42. Pham TH, Rimé B, Philippot. Subjective and autonomic responses to emotion induction in psychopaths. *Encéphale*. 2000;26(1):45-51.
43. Hicks BM, Patrick CJ. Psychopathy and negative emotionality: Analyses of suppressor effects reveal distinct relations with emotional distress, fearfulness, and anger-hostility. *J Abnorm Psychol*. 2006;115(2):276-287.
44. Raskin R, Shaw R. Narcissism and the use of personal pronouns. *J Pers*. 1988;56(2):393-404.
45. Moberley B, Villar G. One more time without feeling: Detecting fabricated remorse using linguistic analysis. *Psychiatry Psychol Law*. 2016;23(1):102-112.
46. Pyszczynski T, Greenberg J, Hamilton J, Nix G. On the relationship between self-focused attention and psychological disorder: A critical reappraisal. *Psychol Bull*. 1991;110(3):538-543.
47. Rude S, Gortner E-M, Pennebaker J. Language use of depressed and depression-vulnerable college students. *Cogn Emot*. 2004;18(8):1121-1133.
48. Paulhus DL, Curtis SR, Jones DN. Aggression as a trait: The Dark Tetrad alternative. *Curr Opin Psychol*. 2018;19:88-92.
49. Courson M, Macoir J, Tremblay P. A facilitating role for the primary motor cortex in action sentence processing. *Behav Brain Res*. 2018;336:244-249.
50. Hare RD. Psychopathy, the PCL-R, and criminal justice: Some new findings and current issues. *Can Psychol*. 2016;57(1):21-34.
51. Pham TH, Ducro C, Luminet O. Psychopathy, alexithymia and emotional intelligence in a forensic hospital. *Int J Forensic Ment Health*. 2010;9(1):24-32.
52. Pham TH, Saloppé X. Influence of psychopathy on self-perceived quality of life in forensic patients: A cohort study in Belgium. *J Forens Psychiatry Psychol*. 2013;24(1):31-47.
53. Pham TH, Philippot P. Decoding of facial expression of emotion in criminal psychopaths. *J Pers Disord*. 2010;24(4):445-459.
54. Hallé P, Hodgins S, Roussy, S. Revue critique des études expérimentales auprès de détenus adultes: Précision du syndrome de la psychopathie. In: Pham TH & Côté G., editors, *Psychopathie: théorie et recherche*. Lille (FR): Presses universitaires du Septentrion; 2000. p. 145-182.

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# Intimate Partner Violence Among Pregnant Saudi Women: Prevalence, Risk Factors, and Attitudes

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Intimate partner violence (IPV) during pregnancy has become a focus of attention in recent years, owing to its relatively high prevalence, its impact on maternal and fetal health, and its cumulative effects over time. This study aims to determine the magnitude and characteristics of IPV among pregnant Saudi Arabian women, to identify the factors that increase the risk, and to assess the willingness of abused women to report IPV. This is a cross-sectional, community-based survey of pregnant women in the Eastern Province of Saudi Arabia. A modified Abuse Assessment Score (AAS) questionnaire was used. Sociodemographic data were collected. Data related to willingness to report IPV, including reasons for declining to report IPV, were also collected. A total of 1,330 women completed the three parts of the survey. In total, 345 (25.9%) women reported emotional abuse during pregnancy, whereas 72 (5.4%) reported physical abuse and 180 (13.5%) reported sexual abuse. In emotional abuse, a significant association was found between having more children ( $p = .001$ ), having a lower education ( $p = .05$ ), having a lower income ( $p = .04$ ), and being abused. In physical abuse during pregnancy, no significant associations were found between all variables and being abused. However, in reporting sexual abuse among women during pregnancy, a significant increase in the risk was found in those with four or more children ( $p = .01$ ) and those who are employed ( $p = .01$ ). More than two-thirds (71.2%) of abused pregnant women were unwilling to report the abusive acts to a medical authority. IPV is common among pregnant Saudi women. Emotional abuse is the commonest form of IPV, affecting one in four women. More than two-thirds of abused women were unwilling to report their partner's abusive acts. Screening for IPV may encourage women to seek help and improve both maternal and fetal health.

**Key words:** *Intimate partner violence, Saudi Arabia, pregnancy and abuse, Abuse Assessment Score, emotional abuse, physical abuse, sexual abuse*

## Introduction

Intimate partner violence (IPV) during pregnancy has become a focus of attention in recent years, owing to its relatively high prevalence, its impact on maternal and fetal health, and its cumulative effects over time. According to the World Health Organization (WHO) [1], IPV is manifested by behaviours that cause physical, sexual, or psychological harm, such as acts of

physical aggression, sexual coercion, psychological abuse, and controlling behaviours. The Family Violence Prevention Fund [2], gives a broader definition: "Intimate partner violence is a pattern of assaultive and coercive behaviours that may include inflicted physical injury, psychological abuse, sexual assault, progressive isolation, stalking, deprivation, intimidation, and threats."

Comparing IPV in pregnancy to medical diseases for which pregnant women are routinely screened, such as gestational diabetes and pre-eclampsia, IPV may be as common or even more common than those conditions, with measurable effects on maternal and fetal health [3,4]. Routine screening for IPV during pregnancy is a matter of debate, as most abused women tend not to disclose abusive acts. Multiple systematic reviews of IPV screening programs have provided insufficient data from which to recommend for or against routine screening [5]. However, many groups recommend routine screening, including the American College of Obstetricians and Gynecologists, who advised in 2012 that all women be screened for IPV at periodic intervals, in the first prenatal visit, at least once per trimester, and at the postpartum checkup [6]. In contrast, the WHO [1] issued guidelines that advised against the routine screening for IPV in women. However, they recommended that women who have a significantly increased risk, or who present with signs or symptoms suggesting possible IPV (e.g., unexplained injuries or depression), be asked about possible IPV exposure.

Nelson et al. [7] systematically reviewed the effectiveness of screening and interventions in reducing IPV and related health outcomes, as well as the accuracy of screening tools. They concluded that screening could reduce IPV and improve health outcomes, and that the screening instruments designed for health-care settings could accurately identify women experiencing IPV.

Kiely et al. [8] conducted a randomized controlled trial of 1,044 pregnant African-American women to evaluate the efficacy of a psycho-behavioural intervention during prenatal and postpartum care on the reduction of IPV recurrence and improved pregnancy outcomes. They compared usual care to perinatal counselling in addressing IPV-related danger. The trial showed efficacy in reducing IPV victimization and improving pregnancy outcomes, with decreased rates in recurrent IPV and depression.

Violence against pregnant women carries a high risk of morbidity and mortality. This risk includes mental health issues as abused pregnant women are more likely to develop psychological disorders, have an increased risk of depression and suicide attempts, and have a higher risk for substance abuse and sexual dysfunction [5]. In addition, abused pregnant women are at greater risk of further abuse, and in severe danger of murder [9]. Desmarais et al. [10] also found a relation between abuse during pregnancy and postpartum mental health, as these women were more liable to develop posttraumatic stress disorder, depression, and obsessive-compulsive disorder. Physical injuries in abused women ranged from 40% to 72% [11].

During pregnancy, maternal complications of IPV include miscarriages, infections, low weight gain, antepartum hemorrhage, preterm labour and birth, premature rupture of membrane, and maternal death [5,11,12]. Maternal mortality rates were reported to be as high as 16% in one study conducted in India, which makes it the second most common cause of maternal death, after postpartum hemorrhage. However, the authors believe that the prevalence could be higher, owing to underreported and misclassified maternal deaths [13].

Fetal complications of IPV include intrauterine growth restriction, low birth weight, fetal injury, and death [5,14]. Perinatal and neonatal death rates were also increased, mostly owing to prematurity [15,16].

Data conflicts as to whether pregnancy is considered a risk factor for violence initiation or escalation, or if pregnancy is a protective factor, most likely owing to differences in research design and assessment. Castro et al. [17] compared the prevalence of emotional, physical, and sexual abuse before and during pregnancy, and found no statistically significant differences in the prevalence. In addition, in a longitudinal review of data, Jasinski [18] found that pregnant women were no more or less likely to be abused than non-pregnant women.

## Prevalence

The problem with estimating prevalence among pregnant women is the use of different assessment tools, which give different results. Using questionnaires with general non-specific questions about abuse has led to the underestimation of the prevalence, compared with using more behaviourally specific questions. Moreover, personal interviews, using a standardized, psychometrically sound measure of physical violence, resulted in higher rates of reporting of violence than self-reported, single-item measures [19].

Prevalence of IPV during pregnancy ranged from 6% to 15% in population-based studies done in Canada, Chile, Egypt, and Nicaragua [11]. In an American study, the estimated prevalence of IPV during pregnancy ranged between 3.9% and 8.3% [3]. The WHO multi-country study [20], which screened 24,000 women from 10 different countries (it did not include Saudi Arabia), reported a lifetime prevalence of physical and (or) sexual IPV to be between 15% and 71%. In developed countries, Gazmararian et al. [4] concluded that the prevalence of IPV ranged from 0.9% to 20.0%. These major differences in prevalence were thought to be due to different methods of screening and to differences in the populations studied. Kashif et al. [21] conducted a systematic, integrated review of literature from Bangladesh, Pakistan, India, China, Thailand, and Iran. They found the prevalence of violence during pregnancy ranged between 4.3% and 48.0%. In a developing country such as Zimbabwe, Shamu et al. [22] estimated that 63.1% of pregnant women reported physical, emotional, and (or) sexual IPV during pregnancy, with 10.0% of them reporting severe violence during pregnancy.

These high rates of prevalence during pregnancy are thought to be inaccurate, as most abused women are reluctant to disclose IPV, owing to different psychological and social factors [14].

To our knowledge, there is no estimation of the prevalence of IPV among pregnant Saudi

women. It is assumed that the IPV rate is high in an Arabic country, owing to cultural and environmental reasons. In Arabic communities, the victim may be blamed for angering her husband. IPV is sometimes seen as a justifiable response to misbehaviour and wrongdoing of the wife. Arabic women tend to consider the abuse as a private family issue and believe that the family should be the first help-seeking option [23].

This study aims to determine the magnitude, scope, and characteristics of IPV, to identify the factors that increase the risk, and to assess the willingness of abused women to report IPV. Knowing the prevalence will help Arabic communities in acknowledging the existence of IPV, including knowing the reasons that are preventing women from seeking help. It will also provide guidance to these communities in the development of programs to reach out to victims of IPV.

## Methods

This cross-sectional, community-based survey of pregnant Saudi women was approved by the Institutional Review Board of Imam Abdulrahman Bin Faisal University. A modified Abuse Assessment Score (AAS) questionnaire was used. The study was conducted in the Eastern Province of Saudi Arabia, from January to June 2016. The questionnaires were given to pregnant women visiting antenatal clinics in hospitals and primary health-care centres across the Eastern Province (in the following cities: Khobar, Dammam, Qatif, Huffof, and Jubail). Inclusion criteria were as follows: women with a current pregnancy of any gestational age, Muslim Arabic ethnicity, and currently married.

The questionnaire consisted of three parts. The first part covered the sociodemographic characteristics of the participants, including age, number of children, educational level, family income, employment status, and living arrangement.

The second part of the questionnaire was the assessment tool. IPV was measured using four modified and translated questions of the AAS

questionnaire. The first question asked about emotional abuse during the pregnancy (Have you ever been emotionally abused by your husband in the form of verbal abuse, intimidation, or ridicule during your pregnancy?). The second question was about physical abuse in the year before her current pregnancy (Within the last year, have you been hit, slapped, kicked, or otherwise physically hurt by your husband?). The third question was about physical abuse during this pregnancy (Since you have been pregnant, have you been hit, slapped, kicked, or otherwise physically hurt by your husband?). The fourth question was about sexual abuse in pregnancy (During your pregnancy, has anyone forced you to have any form of sexual activities?). In all of the questions used, the husband was referred to as the abuser. Answering positively to any of these questions would identify the woman as being abused.

The third part of the questionnaire included questions developed and added by the researchers about how willing the participants were to report the abuse and the reasons for not reporting. Abused women were asked a question about their willingness to seek help in the presence of a competent medical authority. Participants who did not want to seek help were asked about the reasons that prevent them from seeking help.

Respondents were asked whether they believed that the abuse by their husband was justifiable because of their (perceived) failure in their duties toward him or because the husband was under psychological stresses that might explain and justify his abuse. In addition, they were asked if they thought this abusive act was an isolated event. Respondents were asked if they were not reporting the assault because they thought it was a private matter that must be resolved internally, without seeking help outside the family framework, or if they thought that reporting the issue would expose them to more abuse. In addition, they were asked if they were not reporting the assault because of their fear that seeking help would lead to separation or divorce, and thus the disintegration of the family. In addition, respondents were asked if

they believed that the assault was justifiable, owing to religious reasons. An example of a religious reason would be that Muslim women believe that being patient and obedient to their husband will be rewarded. Finally, respondents were asked if they believed that reporting the assault would not help them.

A total of 1,559 pregnant women answered the questionnaire; among these, 229 were excluded, because they had not completed all of the questions. A total of 1,330 women completed the three parts of the questionnaire and were included in the analysis.

Sample size was calculated based on a precision of 4% and a confidence interval of 99%. The estimated population was entered as 32,000, which is the total number of deliveries in the Eastern Province. The estimated prevalence, based on previous studies, was 50%. The following formula was used:

$$n = (t)^2 \times p(1 - p) / m^2$$

The required sample size was 1,005. An additional sample of 20% ( $n = 201$ ) was added to make up for lost or incomplete data. The total size sample was estimated to be 1,206.

Data were analyzed using the Statistical Analysis Package for the Social Sciences, version 23.0 (IBM Corp., Armonk, NY, USA). Data were presented as frequencies and percentages. Differences between the two groups were analyzed by using the chi-square test. A  $p < .05$  was considered significant.

## Results

A total of 1,330 women were included in the survey. Their ages ranged from 14 to 50 years, with a mean age of 29.8 years (standard deviation 6.57 years). Most women were in their twenties, university-educated, unemployed housewives, with an average-to-high family income, less than four children, and lived with their husband in a separate house (not with their spouse's family). The sociodemographic characteristics of all the participants are shown in Table 1.

**Table 1: Sociodemographic characteristics of survey participants (N = 1,330)**

Variable	n (%)
Age, years	
14–19	32 (2.4)
20–29	660 (49.6)
30–39	512 (38.5)
40–50	126 (9.5)
Number of children	
Zero	254 (19.1)
1–3	720 (54.1)
4–10	356 (26.8)
Education	
Illiterate	6 (0.5)
Elementary/middle school	101 (7.6)
High school	427 (32.1)
Diploma	57 (4.3)
University	711 (53.5)
Masters	16 (1.2)
Doctorate	12 (0.9)
Family income, Saudi riyal/month	
<2000	124 (9.3)
2000–8000	601 (45.2)
>8000	605 (45.5)
Employment	
Employed	481 (36.2)
Unemployed	849 (63.8)
Living arrangement	
With spouse	1,000 (75.2)
With spouse's family	330 (24.8)

Among the 1,330 women in the study sample, 345 (25.9%) were emotionally abused during pregnancy, 72 (5.4%) reported physical abuse during pregnancy, and 180 (13.5%) reported sexual abuse during pregnancy.

Differences between women who reported emotional, physical, or sexual abuse during pregnancy and those who did not are presented in Table 2. As shown, age and living arrangement were not significantly associated with any type of abuse during pregnancy. In emotional abuse, there was a significant association between having more children ( $p =$

.001), lower education ( $p = .05$ ), lower income ( $p = .04$ ), and being abused. In physical abuse during pregnancy, no significant associations were found between the sociodemographic variables and being abused. However, in reporting sexual abuse during pregnancy, a significant increase in risk was found in women with four or more children ( $p = .01$ ) and those who were employed ( $p = .01$ ).

Table 3 shows the different sociodemographic variables in relation to women who reported any type of abuse in the total number of participants, women who reported any type of abuse during pregnancy only, and women who reported physical abuse before the pregnancy. Among the 1,330 women, 420 (31.57%) women reported being abused, either during their current pregnancy or in the year preceding their pregnancy. Having four or more children ( $p = .001$ ) and having a lower education ( $p = .01$ ) appeared as significant risk factors. Similarly, having four or more children ( $p = .001$ ) and lower education ( $p = .01$ ) appeared as significant risk factors for being abused during pregnancy, with a total of 410 (30.83%) participants reporting any type of abuse during pregnancy.

A total of 121 women reported physical abuse in the year preceding the pregnancy, representing 9.1% of all women. Age appeared to be a significant risk factor in this case ( $p = .05$ ) as women in their thirties were more likely to be exposed to physical abuse before pregnancy. Moreover, having less than four children ( $p = .02$ ) and lower education ( $p = .03$ ) appeared to be significant risk factors.

A total of 72 women were physically abused in pregnancy, representing 17.1% of all abused women. A quarter of them were physically abused for the first time during pregnancy. This can be compared with the 121 women who were abused before pregnancy, who represent 28.8% of all abused women. Among these women, 55.4% did not report abuse during pregnancy.

A total of 37 women were physically, emotionally, and sexually abused during pregnancy,

**Table 2: Sociodemographic characteristics and form of abuse during pregnancy for survey participants reporting and not reporting violence during pregnancy (N = 1,330)<sup>a</sup>**

Variable	Emotional abuse			Physical abuse			Sexual abuse		
	Yes	No	p	Yes	No	p	Yes	No	p
Age, years	n = 345	n = 985		n = 72	n = 1,258		n = 180	n = 1,150	
14–19, n = 32	5 15.6% 1.4%	27 84.4% 2.7%	.143	2 6.3% 2.8%	30 93.8% 2.4%	.718	9 28.1% 5.0%	23 71.9% 2.0%	.136
20–29, n = 660	156 23.6% 45.2%	504 76.4% 51.2%		32 4.8% 44.4%	628 95.2% 49.9%		83 12.6% 46.1%	577 87.4% 50.2%	
30–39, n = 512	147 28.7% 42.6%	365 71.3% 37.1%		33 6.4% 45.8%	479 93.6% 38.1%		69 13.5% 38.3%	443 86.5% 38.5%	
40–50, n = 126	37 29.0% 10.7%	89 71.0% 9.0%		5 4.0% 6.9%	121 96.0% 9.7%		19 15.3% 10.6%	107 84.7% 9.3%	
Number of children	n = 345	n = 985		n = 72	n = 1,258		n = 180	n = 1,150	
0, n = 254	43 16.9% 12.5%	211 83.1% 21.4%	.001	7 2.8% 9.7%	247 97.2% 19.6%	.114	23 9.1% 12.8%	231 90.9% 20.1%	.011
1–3, n = 720	188 26.1% 54.5%	532 73.9% 54.0%		43 6.0% 59.7%	677 94.0% 53.8%		95 13.2% 52.8%	625 86.8% 54.3%	
4–10, n = 356	114 32.0% 33.0%	242 68.0% 24.6%		22 6.2% 30.6%	334 93.8% 26.6%		62 17.4% 34.4%	294 82.6% 25.6%	
Education	n = 345	n = 985		n = 72	n = 1,258		n = 180	n = 1,150	
Illiterate, n = 6	4 66.7% 1.2%	2 33.3% 0.2%	.058	1 16.7% 1.4%	5 83.3% 0.4%	.889	3 50.0% 1.7%	3 50.0% 0.3%	.069
Elementary/ middle school, n = 101	32 31.7% 9.3%	69 68.3% 7.0%		6 5.9% 8.3%	95 94.1% 7.6%		18 17.8% 10.0%	83 82.2% 7.2%	
High school, n = 427	123 28.8% 35.7%	304 71.2% 30.9%		22 5.2% 30.6%	405 94.8% 32.2%		63 14.8% 35.0%	364 85.2% 31.7%	
Diploma, n = 57	12 21.1% 3.5%	45 78.9% 4.6%		3 5.3% 4.2%	54 94.7% 4.3%		5 8.8% 2.8%	52 91.2% 4.5%	
University, n = 711	169 23.8% 49.0%	542 76.2% 55.0%		39 5.5% 54.2%	672 94.5% 53.4%		89 12.5% 49.4%	622 87.5% 54.1%	
Masters, n = 16	3 18.8% 0.9%	13 81.3% 1.3%		1 6.3% 1.4%	15 93.8% 1.2%		1 6.3% 0.6%	15 93.8% 1.3%	
Doctorate, n = 12	2 16.7% 0.6%	10 83.3% 1.0%		0 0.0% 0.0%	12 100.0% 1.0%		1 8.3% 0.6%	11 91.7% 1.0%	

*continued*

Table 2, continued

Variable	Emotional abuse			Physical abuse			Sexual abuse		
	Yes	No	<i>p</i>	Yes	No	<i>p</i>	Yes	No	<i>p</i>
Family income, Saudi riyal/month	<i>n</i> = 345	<i>n</i> = 985		<i>n</i> = 72	<i>n</i> = 1,258		<i>n</i> = 180	<i>n</i> = 1,150	
<2000, <i>n</i> = 124	43 34.7% 12.5%	81 65.3% 8.2%	.041	9 7.3% 12.5%	115 92.7% 9.1%	.584	18 14.5% 10.0%	106 85.5% 44.1%	.078
2000–8000, <i>n</i> = 601	158 26.3% 45.8%	443 73.7% 45.0%		33 5.5% 45.8%	568 94.5% 45.2%		94 15.6% 52.2%	507 9.2% 84.4%	
>8000, <i>n</i> = 605	144 23.8% 41.7%	461 76.2% 46.8%		30 5.0% 41.7%	575 95.0% 45.7%		68 11.2% 37.8%	537 88.8% 46.7%	
Employment	<i>n</i> = 345	<i>n</i> = 985		<i>n</i> = 72	<i>n</i> = 1,258		<i>n</i> = 180	<i>n</i> = 1,150	
Employed, <i>n</i> = 481	131 27.2% 38.0%	350 72.8% 35.5%	.227	29 6.0% 40.3%	452 94.0% 35.9%	.265	79 16.4% 43.9%	402 83.6% 35.0%	.013
Unemployed, <i>n</i> = 849	214 25.2% 62.0%	635 74.8% 64.5%		43 5.1% 59.7%	806 94.9% 64.1%		101 11.9% 56.1%	748 88.1% 65.0%	
Living arrangement	<i>n</i> = 345	<i>n</i> = 985		<i>n</i> = 72	<i>n</i> = 1,258		<i>n</i> = 180	<i>n</i> = 1,150	
With spouse, <i>n</i> = 1,000	252 25.2% 73.0%	748 74.8% 75.9%	.159	53 5.3% 73.6%	947 94.7% 75.3%	.421	130 13.0% 72.2%	870 87.0% 75.7%	.184
With spouse's family, <i>n</i> = 330	93 28.2% 27.0%	237 71.8% 24.1%		19 5.8% 26.4%	311 94.2% 24.7%		50 15.2% 27.8%	280 84.8% 24.3%	

<sup>a</sup> The first percentage given in a cell is for the number in that row. The second percentage is for the number in that column.

representing 9% of women abused in pregnancy and 2.8% of all women who participated.

Among the 420 women who were abused, 299 (71.2%) women answered that they were unwilling to report the abusive acts to a medical authority. Eighty-nine (29.8%) of the women indicated they believed that the abuse was a private matter that must be resolved internally, without seeking help outside the family framework. Fifty-seven (19.1%) women said they thought that what had happened was an isolated incident that would not be repeated. Fifty-three (17.7%) women indicated they believed that the husband was under stress at the time of the assault, and that it would resolve itself over

time. Forty-two (14%) women said they were afraid that reporting the assault would lead to divorce. Thirty (10%) women indicated they thought that reporting the abuse might expose them to more assault. Twenty-four (8%) women said they believed that the assault by the husband was justifiable because they had failed in their duties toward him. Only 15 (5%) women said the assault was justifiable because of religious reasons. Moreover, 84 (28.1%) women said they believed that reporting the abuse would not help them. The women's reasons are shown in Figure 1.

None of the sociodemographic variables were significantly associated with the survey participants' agreement or refusal to report abuse, as presented in Table 4.

**Table 3: Sociodemographic characteristics of survey participants abused before and during pregnancy, compared with all participants (N = 1,330)<sup>a</sup>**

Variable	Physical abuse 12 months before pregnancy			Any type of abuse during pregnancy			Any type of abuse in all participants		
	Yes	No	p	Yes	No	p	Yes	No	p
Age, years	n = 121	n = 1,209		n = 410	n = 920		n = 420	n = 910	
14–19, n = 32	2 6.3% 1.7%	30 93.8% 2.5%	.051	9 28.1% 2.2%	23 71.9% 2.5%	.221	9 28.1% 2.1%	23 71.9% 2.5%	.180
20–29, n = 660	51 7.7% 42.1%	609 92.3% 50.4%		185 28.0% 45.1%	475 72.0% 51.6%		189 28.6% 45.0%	472 71.4% 51.8%	
30–39, n = 512	58 11.3% 47.9%	454 88.7% 37.6%		171 33.4% 41.7%	341 66.6% 37.1%		176 34.4% 41.9%	336 65.6% 36.9%	
40–45, n = 126	10 7.3% 8.2%	116 92.7% 9.6%		45 35.5% 10.9%	81 64.5% 8.8%		46 36.3% 10.9%	79 63.7% 8.7%	
Number of children	n = 121	n = 1,209		n = 410	n = 920		n = 420	n = 910	
0, n = 254	14 5.5% 11.6%	240 94.5% 19.9%	.029	52 20.5% 12.7%	202 79.5% 22.0%	.001	53 20.9% 12.6%	201 79.1% 22.1%	.001
1–3, n = 720	65 9.0% 53.7%	655 91.0% 54.2%		222 30.8% 54.1%	498 69.2% 54.1%		226 31.4% 53.8%	494 68.6% 54.3%	
4–10, n = 356	42 11.8% 34.7%	314 88.2% 26.0%		136 38.2% 33.2%	220 61.8% 23.9%		141 39.6% 33.6%	215 60.4% 23.6%	
Education	n = 121	n = 1,209		n = 410	n = 920		n = 420	n = 910	
Illiterate, n = 6	1 16.7% 0.8%	5 83.3% 0.4%	.036	4 66.7% 1.0%	2 33.3% 0.2%	.022	4 66.7% 1.0%	2 33.3% 0.2%	.014
Elementary/ middle school, n = 101	15 14.9% 12.4%	86 85.1% 7.1%		40 39.6% 9.8%	61 60.4% 6.6%		42 41.6% 10.0%	59 58.4% 6.5%	
High school, n = 427	50 11.7% 41.3%	377 88.3% 31.2%		145 34.0% 35.4%	282 66.0% 30.7%		149 34.9% 35.5%	278 65.1% 30.5%	
Diploma, n = 57	2 3.5% 1.7%	55 96.5% 4.5%		12 21.1% 2.9%	45 78.9% 4.9%		12 21.1% 2.9%	45 78.9% 4.9%	
University, n = 711	51 7.2% 42.1%	660 92.8% 54.6%		203 28.6% 49.5%	508 71.4% 55.2%		206 29.0% 49.0%	505 71.0% 55.5%	
Masters, n = 16	1 6.3% 0.8%	15 93.8% 1.2%		3 18.8% 0.7%	13 81.3% 1.4%		4 25.0% 1.0%	12 75.0% 1.3%	
Doctorate, n = 12	1 8.3% 0.8%	11 91.7% 0.9%		3 25.0% 0.7%	9 75.0% 1.0%		3 25.0% 0.7%	9 75.0% 1.0%	

*continued*

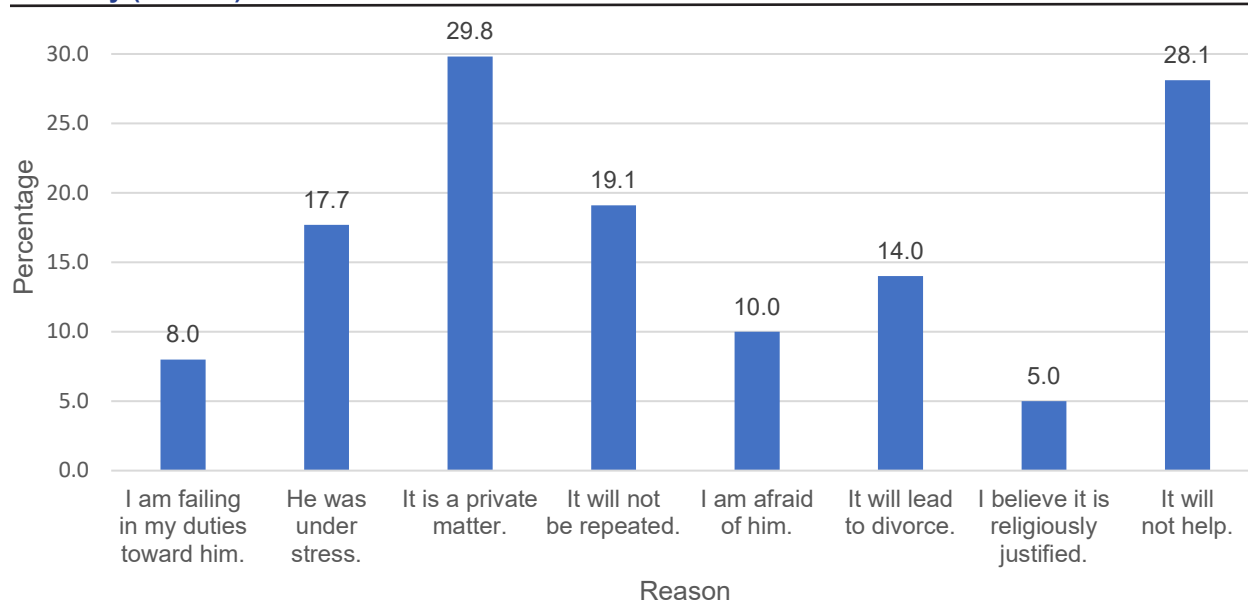


**Table 3, continued<sup>a</sup>**

Variable	Physical abuse 12 months before pregnancy			Any type of abuse during pregnancy			Any type of abuse in all participants		
	Yes	No	p	Yes	No	p	Yes	No	p
Family income, Saudi riyal/month	<i>n</i> = 121	<i>n</i> = 1,209		<i>n</i> = 410	<i>n</i> = 290		<i>n</i> = 420	<i>n</i> = 910	
<2000, <i>n</i> = 124	15 12.1%	109 87.9%	.432	45 36.3%	79 63.7%	.147	45 36.3%	79 63.7%	.160
	12.4%	9.0%		11.0%	8.6%		10.7%	8.7%	
2000–8000, <i>n</i> = 601	55 9.2%	546 90.8%		193 32.1%	408 67.9%		199 33.1%	408 66.9%	
	45.5%	45.2%		47.1%	44.3%		47.4%	44.8%	
>8000, <i>n</i> = 605	51 8.4%	554 91.6%		172 28.4%	433 71.6%		176 29.4%	423 70.6%	
	42.1%	45.8%		42.0%	47.1%		41.9%	46.5%	
Employment	<i>n</i> = 121	<i>n</i> = 1,209		<i>n</i> = 410	<i>n</i> = 290		<i>n</i> = 420	<i>n</i> = 910	
Employed, <i>n</i> = 481	49 10.2%	432 89.8%	.173	158 32.8%	323 67.2%	.127	162 33.7%	319 66.3%	.119
	40.5%	35.7%		38.5%	35.1%		38.6%	35.1%	
Unemployed, <i>n</i> = 849	72 8.5%	777 91.5%		252 29.7%	597 70.3%		258 30.4%	591 69.6%	
	59.5%	64.3%		61.5%	64.9%		61.4%	64.9%	
Living arrangement	<i>n</i> = 121	<i>n</i> = 1,209		<i>n</i> = 410	<i>n</i> = 290		<i>n</i> = 420	<i>n</i> = 910	
With spouse, <i>n</i> = 1,000	92 9.2%	908 90.8%	.460	302 30.2%	698 69.8%	.213	310 31.0%	690 69.0%	.234
	76.0%	75.1%		73.7%	75.9%		73.8%	75.8%	
With spouse's parents, <i>n</i> = 330	29 8.8%	301 91.2%		108 32.7%	222 67.3%		110 33.3%	220 66.7%	
	24.0%	24.9%		26.3%	24.1%		26.2%	24.2%	

<sup>a</sup> The first percentage given in a cell is for the number in that row. The second percentage is for the number in that column.

**Figure 1: Reasons given by survey participants for unwillingness to report abuse to a medical authority (N = 299)**



## Discussion

IPV is defined by the US Centers for Disease Control and Prevention as physical, sexual, or psychological harm by a current or former partner or spouse. In our study, we included only married women, owing to the sensitivity of asking about extramarital relationships. In our local press, cases have been reported about women killed by their ex-husbands. In 2013, a law was passed to charge husbands who harm their wives physically, sexually, or psychologically. The penalty includes a maximum sentence of three years in jail and US\$14,000 in compensation to be paid to the wife. This is only in cases in which the physical injury does not lead to permanent injury or death. In those cases, criminal law is to be applied. Before this law was passed, IPV was dealt with as a domestic problem. The issue was usually resolved between the couple, or family members may intervene to resolve the violence inflicted on the woman. A small number of cases have reached a court of law, indicating that there is major underreporting of IPV, and that families may be resorting to other methods of resolution.

In a recent systemic review and meta-analysis [24], IPV during pregnancy was found to be associated with adverse infant outcomes, manifesting in preterm birth (PTB) and low birth weight (LBW). The authors included 50 articles in their final analysis. Even after adjusting for confounding factors, the pooled odds ratios for PTB and LBW were significantly increased. The effect on PTB and LBW has been associated with physical, sexual, and emotional violence. These effects have been confirmed in many other cohorts, and in cross-sectional, systemic reviews and meta-analysis [24].

Although the detrimental effects of IPV are conclusive, the prevalence of IPV

**Table 4: Sociodemographic characteristics of survey participants willing and unwilling to report abuse, % (N = 1,330)<sup>a</sup>**

Variable	Women willing to report abuse	Women unwilling to report abuse	Difference, <i>p</i>
Age, years	<i>n</i> = 115	<i>n</i> = 299	
14–19, <i>n</i> = 32	2 22.2% 1.7%	7 77.8% 2.3%	.172
20–29, <i>n</i> = 660	43 23.1% 37.4%	143 76.9% 47.8%	
30–39, <i>n</i> = 512	55 31.8% 47.8%	118 68.2% 39.5%	
40–50, <i>n</i> = 126	15 31.1% 13.1%	31 68.9% 10.4%	
Number of children	<i>n</i> = 115	<i>n</i> = 299	
0, <i>n</i> = 52	17 32.7% 14.8%	35 67.3% 11.7%	.502
1–3, <i>n</i> = 223	57 25.6% 49.6%	166 74.4% 55.5%	
4–10, <i>n</i> = 139	41 29.5% 35.7%	98 70.5% 32.8%	
Education	<i>n</i> = 115	<i>n</i> = 299	
Illiterate, <i>n</i> = 4	1 25.0% 0.9%	3 75.0% 1.0%	.910
Elementary/ middle school, <i>n</i> = 42	12 28.6% 10.4%	30 71.4% 10.0%	
High school, <i>n</i> = 148	44 29.7% 38.3%	104 70.3% 34.8%	
Diploma, <i>n</i> = 12	5 41.7% 4.3%	7 58.3% 2.3%	
University, <i>n</i> = 201	51 25.4% 44.3%	150 74.6% 50.2%	
Masters, <i>n</i> = 4	1 25.0% 0.9%	3 75.0% 1.0%	
Doctorate, <i>n</i> = 3	1 33.3% 0.9%	2 66.7% 0.7%	

*continued*

**Table 4, continued**

Variable	Women willing to report abuse	Women unwilling to report abuse	Difference, <i>p</i>
Family income, Saudi riyal/month	<i>n</i> = 115	<i>n</i> = 299	
<2000, <i>n</i> = 44	10 22.7% 8.7%	34 77.3% 11.4%	.607
2000–8000, <i>n</i> = 196	53 27.0% 46.1%	143 73.0% 47.8%	
>8000, <i>n</i> = 174	52 29.9% 45.2%	122 70.1% 40.8%	
Employment	<i>n</i> = 115	<i>n</i> = 299	
Employed, <i>n</i> = 160	49 30.6% 42.6%	111 69.4% 37.1%	.180
Unemployed, <i>n</i> = 254	66 26.0% 57.4%	188 74.0% 62.9%	
Living arrangement	<i>n</i> = 115	<i>n</i> = 299	
With spouse, <i>n</i> = 307	84 27.4% 73.0%	223 72.6% 74.6%	.419
With spouse's parents, <i>n</i> = 107	31 29.0% 27.0%	76 71.0% 25.4%	

<sup>a</sup> The first percentage given in a cell is for the number in that row. The second percentage is for the number in that column.

is variable around the globe. In some regions, there are no studies on IPV. In other regions where IPV has been addressed, the prevalence varies from as low as 0.9% in some developed countries to 70% in some developing countries. The prevalence of IPV has been estimated in one region of Saudi Arabia (Taif) to be 11.9% [25]. There are no studies in Saudi Arabia estimating the prevalence of IPV during pregnancy. In our study, the reported physical abuse during pregnancy was 5.4%, which is 45% less than the general prevalence reported in Saudi Arabia. Jasinski [18] proposed that pregnancy-related factors might increase the stress experienced by the couple, which may increase the risk for IPV during pregnancy.

However, the author concluded that pregnant women were no more or less likely to be victims of IPV.

In our study, pregnancy appeared to be a protective factor against physical abuse, as the incidence of IPV decreased by more than 55%. The overall prevalence of abuse in pregnancy in this study, 30.8%, exceeded prevalence rates reported in some developed countries [4,26], but fell within the reported range for developing countries [21]. The prevalence of psychological abuse during pregnancy in our study was 25.9%, which is comparable to the prevalence rate of 26.6% in the American state of Tennessee, as reported by Gentry & Bailey [27]. However, these prevalence rates are much higher than the prevalence of 15% reported in Malta by Debono et al. [28].

Similar to other studies, our findings revealed significant associations between IPV during pregnancy and some of the socioeconomic characteristics of the abused women. As reported by Debono et al. [28], educational status was found to be a risk factor for psychological abuse during pregnancy. In contrast, age and unemployment status were not found to be risk factors in our study. Moreover, a higher number of children and lower income were associated with higher incidence of psychological abuse during pregnancy.

Numerous studies have investigated the association between women's employment status and the risk for violence during pregnancy, with some studies finding unemployed status to be associated with an increased risk of violence and others finding no association between employment status and risk of violence [29]. Our study found that employment status is a risk factor for sexual abuse during pregnancy. However, it was not significantly associated with emotional or physical abuse.

There has been much debate about the safe and effective identification in health-care

settings of women experiencing IPV. This study used the AAS questionnaire, a behaviourally specific tool, to estimate the prevalence of IPV among pregnant women in Saudi Arabia, to know how willing they are to seek help, and what might prevent them from seeking help.

Among the 420 abused women, 299 (71.2%) indicated that they were unwilling to report abusive acts to a medical authority. The two most common reasons given for unwillingness to report IPV were as follows: the abuse is a private matter that must be resolved internally, without seeking help outside the family framework (29.8%); and what happened is an isolated incident, and it will not be repeated (19.1%). Other reasons included the belief that the husband was experiencing social stresses at the time of the assault (17.7%), that she had failed in her duties toward her husband (8%) and the husband was justified on religious grounds (5%). Others were afraid that reporting the assault would lead to divorce (14%), or that reporting the abuse might expose them to more assaults (10%).

Another important reason for not reporting the abuse is that women thought that reporting would not help (28.1%). This was true a decade ago, but now help is available through the Ministry of Social Affairs, either by calling and reporting the abuse through a free number (1919) or by reporting the abuse online. All reports are investigated, and a team is assembled to resolve any cases of IPV.

These findings show a high prevalence of IPV among pregnant Saudi women. This kind of adversity has been associated with maternal, fetal, and neonatal complications. As a health-care provider, we should have a holistic approach when providing care for abused women. We think the first step in addressing IPV is by raising awareness about its prevalence and effects. Women should be aware that IPV is common, and that they are not alone. Health-care providers should be trained to address IPV and to provide the necessary help through the proper agencies.

The second step is to find ways to prevent IPV by providing different approaches, such as increasing awareness, involving other family members, and better use of the Hemayah organization. Enforcing the existing law, after women report IPV to the authorities, is one factor that may prevent its recurrence. There is no simple or easy solution to such a sensitive, complex, and dangerous issue.

**Conflict of Interest:** none

## References

1. Sohal AH, James-Hanman D. Responding to intimate partner and sexual violence against women. *BMJ*. 2013;346:f3100.
2. Lee D, James L, Sawires P. *Preventing domestic violence: Cincical guidelines on routine screening*. San Francisco, CA: Family Violence Prevention Fund; 1999.
3. Bailey B, Daugherty R. Intimate partner violence during pregnancy: Incidence and associated health behaviors in a rural population. *Matern Child Health J*. 2007;11(5):495-503.
4. Gazmararian J, Lazorick S, Spitz AM, Ballard T, Saltzman L, Marks JS. Prevalence of violence against pregnant women. *JAMA*. 1996;275(24):1915-1920.
5. Cherniak D, Grant L, Mason R, Moore B, Pellizzari, R. Intimate partner violence consensus statement. *J Obstet Gynaecol Can*. 2005;27(4):365-388.
6. No authors listed. ACOG Committee Opinion No. 518: Intimate partner violence. *Obstet Gynecol*. 2012;119(2 Pt 1):412-417.
7. Nelson HD, Bougatsos C, Blazina I. Screening women for intimate partner violence: A systematic review to update the U.S. Preventive Services Task Force recommendation. *Ann Intern Med*. 2012;156(11):796-808.
8. Kiely M, El-Mohandes AAE, El-Khorazaty MN, Gantz MG. An integrated intervention to reduce intimate partner violence in pregnancy: A randomized controlled trial. *Obstet Gynecol*. 2010;115(2 Pt 1):273-283.
9. Bianchi AL, McFarlane J, Nava A, Gilroy H, Maddoux J, Cesario S. Rapid assessment

- to identify and quantify the risk of intimate partner violence during pregnancy. *Birth*. 2014;41(1):88-92.
10. Desmarais SL, Pritchard A, Lowder EM, Janssen PA. Intimate partner abuse before and during pregnancy as risk factors for postpartum mental health problems. *BMC Pregnancy Childbirth*. 2014;14:132.
  11. Krug EG, Dahlberg LL, Mercy JA, Zwi AB, Lozano R, eds. *World report on violence and health*. Geneva (CH): World Health Organization; 2002.
  12. Murphy CC, Schei B, Myhr TL, Du Mont J. Abuse: A risk factor for low birth weight? A systematic review and meta-analysis. *CMAJ*. 2001;164(11):1567-1572.
  13. Ganatra BR, Coyaji KJ, Rao V. Too far, too little, too late: A community-based case-control study of maternal mortality in rural west Maharashtra, India. *Bull World Health Organ*. 1998;76(6):591-598.
  14. Bailey BA. Partner violence during pregnancy: Prevalence, effects, screening, and management. *Int J Womens Health*. 2010;2:183-197.
  15. Ahmed S, Koenig MA, Stephenson R. Effects of domestic violence on perinatal and early-childhood mortality: Evidence from North India. *Am J Public Health (NY)*. 2006;96(8):1423-1428.
  16. Lipsky S, Holt VL, Easterling, TR, Critchlow, CW. Impact of police-reported intimate partner violence during pregnancy on birth outcomes. *Obstet Gynecol*. 2003;102(3):557-564.
  17. Castro R, Peek-Asa C, Ruiz A. Violence against women in Mexico: A study of abuse before and during pregnancy. *Am J Public Health (N.Y.)*. 2003;93(7):1110-1116.
  18. Jasinski JL. Pregnancy and violence against women: An analysis of longitudinal data. *J Interpers Violence*. 2001;16(7):712-733.
  19. Sagrestano LM, Rodriguez AC, Carroll D, Bieniarz A, Greenberg A, Castro L, Nuwayhid B. A comparison of standardized measures of psychosocial variables with single-item screening measures used in an urban obstetric clinic. *J Obstet Gynecol Neonatal Nurs*. 2002;31(2):147-155.
  20. Garcia-Moreno C, Jansen HAFM, Ellsberg M, Heise L, Watts CH, WHO Multi-country Study on Women's Health and Domestic Violence against Women Study Team. Prevalence of intimate partner violence: Findings from the WHO Multi-country Study on Women's Health and Domestic Violence. *Lancet*. 2006;368(9543):1260-1269.
  21. Kashif M, Murtaza K, Kirkman M. Violence against women during pregnancy in some Asian countries: A review of the literature. *Ital J Public Health*. 2010;7(2):6-11.
  22. Shamu S, Abrahams N, Zarowsky C, Shefer T, Temmerman M. Intimate partner violence during pregnancy in Zimbabwe: A cross-sectional study of prevalence, predictors and associations with HIV. *Trop Med Int Health*. 2013;18(6):696-711.
  23. Haj-Yahia MM. Attitudes of Arab women toward different patterns of coping with wife abuse. *J Interpers Violence*. 2002;17(7):721-745.
  24. Donovan BM, Spracklen CN, Schweizer ML, Ryckman KK, Saftlas AF. Intimate partner violence during pregnancy and the risk for adverse infant outcomes: A systematic review and meta-analysis. *BJOG*. 2016;123(8):1289-1299.
  25. Alzahrani TA, Abaalkhail, BA, Ramadan IK. Prevalence of intimate partner violence and its associated risk factors among Saudi female patients attending the primary healthcare centers in Western Saudi Arabia. *Saudi Med J*. 2016;37(1):96-99.
  26. Bailey BA, Daugherty RA. Intimate partner violence during pregnancy: Incidence and associated health behaviors in a rural population. *Matern Child Health J*. 2007;11(5):495-503.
  27. Gentry J, Bailey BA. Psychological intimate partner violence during pregnancy and birth outcomes: Threat of violence versus other verbal and emotional abuse. *Violence Vict*. 2014;29(3):383-392.
  28. Debono C, Borg Xuereb R, Scerri J, Camilleri L. Intimate partner violence: Psychological and

verbal abuse during pregnancy. *J Clin Nurs.* 2017;26(15-16):2426-2438.

29. Taillieu TL, Brownridge DA. Violence against pregnant women: Prevalence, patterns, risk factors, theories, and directions for future research. *Aggress Violent Behav.* 2010;15(1):14-35.

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# The Greats: Perspectives on Excellence in Forensic Psychiatry

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For forensic psychiatry to thrive as a profession, practitioners need to be committed to intentional, continuous learning and development throughout their careers. However, carving their way through the challenges of practice and finding room to grow can be daunting. Research can help lessen this burden by examining the careers of experienced and skilled practitioners, identifying the factors that influenced their development, and the strategies they used to direct it. To date, little research of this kind has been conducted in forensic psychiatry. In this study, we used the deliberate practice model of elite performance as a heuristic to interpret the accounts of several experienced and distinguished practitioners, revealing and characterizing the influences and activities they identify as having been most important to their development. Semi-structured telephone interviews were conducted with six participants from across North America who started their forensic careers between 1965 and 1980. Transcripts were analyzed using directed content analysis. Participants cited little in the way of highly structured activities designed specifically to improve performance. They instead described using opportunities to learn from real casework and additional knowledge pursuits, as well as using deliberate career management to structure the conditions of their work-based learning. They also stressed the effect of entering forensic practice during a period of increasing interest, demand and investment, which yielded early opportunities to learn through practice. We discuss limitations in the deliberate practice model's capacity to capture key learning strategies in forensic psychiatry, connections between work-based learning and the discipline's general historical trajectory, and the role of career management in professional development strategies.

**Key words:** Forensic psychiatry, deliberate practice model, career management, professional development

*He who knows not and knows not he knows not, he is a fool—shun him.*

*He who knows not and knows he knows not, he is simple—teach him.*

*He who knows and knows not that he knows, he is asleep—awaken him.*

*He who knows and knows that he knows, he is wise—follow him.*

—Bruce Lee, Tao of Jeet Kune Do

## Introduction

In most martial arts, the beginner starts by repeatedly practising a set of basic movements or forms. Over months, through sustained, guided effort, the committed beginner may become a competent intermediate, one who can reliably perform the requisite movements when prompted. Over years, the practitioner learns to integrate movements into increasingly complex functional sets and to do so in increasingly dynamic and unpredictable circumstances. We

come to call those who reach the highest levels exemplary, masterful, exceptional or great. Implied in these estimations is an awareness that they have transcended the static forms on which they had relied and which we, the beginners and intermediates, still depend. For us, the master embodies and exemplifies excellence, a future state to which we aspire, in a way that cannot be adequately represented by these stereotyped forms. Competency at its upper boundaries becomes encapsulated by the master. When asked to define what excellence is, we point to them. It follows from this that, while the general repetition of the blueprint or set of forms may be necessary for us to achieve mastery, this will never be sufficient. We need to return periodically to the masters and see what they do.

The analogy between martial arts and forensic psychiatry, or any other profession for that matter, is inexact in some important ways. However, the idea of the master or a highly skilled, highly experienced expert as a guide is one worth incorporating. In an era in which medical education is increasingly dominated by competency-based education, it is tempting to think of forensic psychiatric competency and excellence as phenomena that can be adequately codified, formalized in abstract frameworks and milestones.

While perhaps necessary and useful in contemporary subspecialty training, we argue that these tools are not sufficient to guide junior practitioners' ongoing development. Specifically, we focus on a few of the integrative and situated skills needed to thoroughly embody and internalize the expert role and facilitate improvement over time in a dynamic professional terrain.

## Methods

We draw on real examples of some masters in the field. As the next best thing to directly observing the work processes and career trajectories of exceptional and highly experienced practitioners, I (Glancy) spoke with six of them in informal, one-on-one phone interviews, using a narrative, journalistic approach.

To protect anonymity, we refer to them by the pseudonyms of Dr. Baker, Dr. Smith, Dr. Foster, Dr. Gatsby, Dr. Riesman, and Dr. Rousseau, and we do not list their accomplishments. As a member of the subsequent generation of North American practitioners, for me these pioneers have served as models and inspirations, as exemplars of excellence to strive toward. As such, the conversations represent a portion of their influence on me and an attempt to encapsulate some of their perspectives and experiences in an ever-evolving conception of professional expertise.

We used directed qualitative analysis in this study. As described by Assarroudi et al. [1], this method is reliable and transparent for qualitative researchers. We refer the reader to the reference for a full description of this method.

### *Some features of the advanced skill set*

While our conversations covered the usual list of competencies, discussion of advanced skills gravitated toward three principal themes representing key aspects of internalization and embodiment of the expert role. These skills are notable in that they constitute integrative or balancing functions, denoting the abilities:

1. to maintain a balance between interpersonal identification and maintenance of social distance while interviewing, providing testimony, and interacting with the legal community;
2. to balance comprehensiveness and succinctness in researching and writing forensic reports; and
3. to internalize the legal reasoning.

## Results

### *Maintaining intersubjective balance*

Forensic psychiatry requires routine interaction with individuals radically different or subjectively distant from ourselves: patients with histories of extreme behavioural disorders



and mental disorders, lay jurors, and legal professionals. The advanced practitioner balances the skills of closeness, attentiveness, forensic empathy, and collaboration with the equally important ability to obtain and retain the distance called for in the expert role.

The clearest example of this relates to interactions and relationships with treated or evaluated individuals. Drs. Rousseau and Baker emphasized the ability to develop a rapport with these individuals. As Dr. Rousseau put it: “you do need to be able to establish rapport with people, because, in my opinion, you’re seeing the sickest of the sick. Not only that, they have, also, usually committed some act of violence.” As noted by Dr. Baker, the imperative to use empathy and develop rapport is particularly challenging because the practitioner simultaneously must maintain sufficient distance to avoid manipulation under circumstances in which the other party also has reason to obfuscate or mangle.

The idea that the excellent forensic psychiatrist possesses the skills to maintain simultaneous attentiveness and intersubjective distance was applied also to the provision of testimony. Being a professional expert implies a significant distance between themselves and the lay juror, the bridging of which was described by Dr. Riesman as one of the most fundamental and challenging aspects of advanced practice. In this context, he emphasized the need to strike a delicate balance, to project confidence in stating one’s expert opinion, while also “see[ing] the other side’s response or understanding of what you’re saying, so watching your audience trying to break it down.” He went on to say that “if you basically have a sense of how to take something and present it in lay terms without seeming like you’re dumbing it down, that might be one of the single most key things.”

A similar theme was also expressed about communication and interaction across the intersubjective gap between practitioners and the legal community. Particularly interesting was how this related to the practitioner’s

general functioning within a potentially alienating professional environment where they may be the only member of the discipline. Dr. Riesman noted that “you have to be able to work with attorneys, who usually will begin by regarding you as a physician.” This alienation cannot be eliminated but is intrinsic to the job. An advanced practitioner develops an awareness of this and builds it into their approach to working with the legal community and advocating for their perspective and expertise, both in general and during examination. One needs to be able to collaborate while asserting one’s position and expertise. Dr. Baker also identified this as critical, “when an attorney pushes you to answer a question a certain way or to do something ... not to get pushed around.”

### *Balancing comprehensiveness and precision*

The process of researching and writing the forensic report presents two broad imperatives to the practitioner wishing to do excellent work. On the one hand, they need to review a potentially large range and volume of information to adequately answer the question at hand. On the other hand, they need to identify and incorporate only that which is relevant and as little of the rest as is possible. In particular, Dr. Baker stressed the need to be attentive to detail, even compulsive, while examining huge volumes of information, both within and between cases, “to be able to go through records in meticulous detail and to pick things up ... to try and remember when you saw a similar thing beforehand or a different thing.” She also noted that an exceptional report is one in which the practitioner “only puts in the information that is relevant to the case and doesn’t put in everything under the sun that they happen to know from any kind of source.”

Dr. Smith described the report itself and its preparation as the primary locus of reasoning and integration. Preliminary drafts serve as a tentative, critically examined record of an emerging scientific opinion (the practitioner’s). In his words, rather than simply being the codification of a chain of reasoning contained in an

abstract realm, the writing process is “when some insights are achieved ... when some hypotheses get discarded and others confirmed.” Hence, we might say that the process of medicolegal reasoning is inseparable from that of researching and writing. The process of organizing empirical data facilitates both conceptual synthesis (new insights) and ongoing critical examination of the data and preliminary attempts to explain the phenomenon in question (hypotheses). Thus, the report is not only a communication tool, but it is also a practical record of and critical tool in the reasoning process—the integration of a large amount of information into a tightly reasoned, highly relevant representation of thought.

### Thinking legally

Because the practitioner’s expert opinion is conveyed in testimony and reports, it is tempting to adopt a strictly communicative notion of what it means to translate clinical findings into a legal opinion. From a superficial perspective, this could be seen to involve a sort of input-output relation: clinical information in, legal opinion out. But true expertise involves something deeper, internalization of the mode of reasoning intrinsic to the law, one markedly distinct from that used in medicine. Dr. Riesman expressed the view that “unless you can get your head around the law and how it works conceptually ... you’re never going to be that good.”

In making these comments, Dr. Riesman emphasized the different conceptual terrains of medicine and the law. If we unearth these different terrains, we might find that the contrast is even more profound than at first sight. Our conversation with Dr. Foster conveyed just such an impression in that he consistently emphasized the uniqueness of forensic psychiatric mastery as something based on legal thinking ability, undergirded by linguistic reasoning skill:

*I’ve had some very bright fellows with a PhD in [a scientific discipline] before they went to medical school and were*

*clearly bright but have not necessarily translated that into a skillful reasoning capacity. And other fellows are very able and just grasp those concepts quickly, some are mediocre, they can take the template and apply the facts in a workman-like way but not as skillful in seeing the bigger picture or subtleties in their organization.*

## Discussion

### The path to excellence

In preparing for our conversations with these experienced practitioners, we were informed by three basic perspectives concerning the development of advanced expertise and expert performance. These were situated within our reading of the research on advanced performance.

1. The first perspective, predominant for much of the latter half of the 20th century, posits that advanced performance is primarily a function of innate ability, intelligence for instance.
2. This was challenged in the 1990s by the work of K.A. Ericsson who argued that the number of hours of rigorous, expert-guided deliberate practice was the decisive factor [2].
3. In turn, this perspective was critiqued as having limited relevance for the complex expertise characteristic in the professions [3,4], neglect of contextual variation in local meanings attributed to expertise, work resources, culture, [5] real-world task demands, professional goals [5], social motivators like parental pressure and societal expectations and, coming full circle, innate talent contributing to early and sustained experiences of successful execution [6].

We do not pretend to adjudicate between these various perspectives but merely state that this was our conceptual starting point. Stated broadly, the three basic avenues of explanation, innate ability, practices and circumstances

informed our conversations. The discussions did not suggest to us that any one of these factors was critical alone. What we did notice were the interesting ways in which these different elements seemed to relate to each other within the experts' accounts. Our experts alluded to seemingly intrinsic or stable traits, sometimes situated within their biographies, which they felt had helped them to obtain, seize, and build upon opportunities, and to function well in multiple key domains. In turn, they viewed these experiences as being linked to their development, where high quality opportunities allowed high quality learning and execution. In most cases, it was not clear whether the personal assets referred to were intrinsic traits or long-term habits and practices. But, from their perspectives, these assets played a role in facilitating development and the progressive embodiment of the expert role.

Before discussing personal characteristics and practices, it is important to dispense with the general notions that judgments concerning who is and is not excellent are purely objective or that the circumstantial determinants of excellence are standard across time and place. The stories of our expert practitioners provide strong counterexamples to such assertions. From the perspective of acquiring distinction and opportunities for growth, all of our experts entered forensic practice during an opportune time. In the 1970s, North American forensic psychiatry was rapidly ascending as a distinct, valued, and institutionalized domain of specialization, culminating with official recognition in 1992 in the United States and in 2011 in Canada. There were few practitioners in the 1970s. This was a dynamic and stimulating period in which the worlds of law and psychiatry were becoming more relevant to each other and in new ways, with a variety of issues related to their intersection. Dr. Gatsby described this as "an extremely exciting time in the field when a lot of law was being made that continues to shape psychiatry, psychiatric practice, and forensic psychiatry today."

This dynamically emerging professional environment potentiated a wide range of

opportunities, even for those who had just chosen to concentrate. "I quickly became the most knowledgeable person in forensic psychiatry in [city]" said Dr. Foster, "because there was no competition." Consequently, even inexperienced fellows and practitioners had a range of opportunities and options available at the beginning of their forensic careers. As Dr. Gatsby put it while discussing the American Academy of Psychiatry and the Law (AAPL): "It was good to be in at the early stages because you could actually do stuff." Dr. Rousseau's story suggested a similar insight but in a particularly poignant manner. He had started forensic practice in a country outside of North America where the discipline had a longer history. A subsequent move to North America provided the chance, as he put it, to be "a bigger fish in a smaller sea."

In addition, all of our experts referred to the fact that organizations, particularly AAPL, were in their early stages. This afforded opportunity for contact with and feedback from the few experts from across the continent in a small group setting. As noted about deliberate practice, it is not just blind practice that makes perfect; expert guidance and feedback on performance are as important as the sheer hours put in. Having access to the senior experts of the time through association participation was a notable advantage.

In considering characteristic personal attributes and practices particular to these individuals, it is critical to bear in mind these good conditions and the opportunities they afforded. In reflecting on these conversations, the picture that emerged for us was of a set of personal assets that situated these individuals well to obtain and make the most out of these opportunities. Despite the access enjoyed at the association level, being one of the few forensic specialists meant that opportunities for guidance and supervision at the local and subject-specific level were minimal. In this way, our discussants were true pioneers. To flourish more than they floundered, they needed and had a variety of integrating skills that would facilitate the strong performance of professional duties and strong

career management. This was likely particularly important as the field grew and became more populated. Reliably doing excellent and gaining a reputation for doing so helped them to ensure that their services were in demand. As such, they were offered exceptional opportunities early on. For example, Dr. Smith was selected early in his career for a “cost is no object’ opportunity to explore wherever the evidence went,” allowing him to establish an early benchmark of thorough work.

Several personal traits or practices that may have facilitated discussants’ progression to greater levels of expertise and distinction were mentioned. Perhaps in part because of modesty, they did not place extensive emphasis on intrinsic characteristics like intelligence as distinguishing the excellent practitioner from the competent one or as the decisive factor in their unusual success and development. They extended this judgment not only to themselves but to the field in general. As expressed by Dr. Smith, “you had to be smart, but there were lots of smart enough people” suggesting a view that intelligence, while essential, is not uncommon among professional peers nor is it sufficient in gaining expertise.

To the extent that anyone did explicitly emphasize some form of apparently intrinsic intelligence, this was mentioned in specific relation to the unique opportunity presented by the forensic subspecialty. Dr. Foster attributed much of his success to the combination of opportunity and aptitude. Self-described as having had to “work hard to get Bs in chemistry, physics, biochemistry, and calculus,” he felt that the emerging option to specialize in forensic psychiatry provided the chance to stand out in a field where “the skill requirements were analytic ability and language skill,” in which he felt he was much stronger. This raises some interesting questions for further consideration. Does the advanced capacity, alluded to by Dr. Rousseau, of being able to “get your head around the law” point to mental faculties more characteristic of the arts and sciences than to the hard sciences?

The other set of assets clearly indicative of some form of innate or stable attributes were social skills, specifically those applicable to multiple domains of forensic competence and career success. For example, one can easily imagine how Dr. Smith’s self-described facility as a child in “passing among all of the social classes ... the bad kids and preppies and jocks and studious kids” could lend itself to effective navigation of the challenging intersubjective domains described previously. One might also speculate that Dr. Riesman’s childhood skill in “firing back the average wisecrack” prepared him not only for cross-examination, as he stated, but also a more general ability to think legally and advocate confidently for his expertise and opinion as a psychiatrist in a legal environment. Similarly, Dr. Gatsby’s life-long strength and interest in debating—having excelled in the debate teams in junior high, high school and college—likely prepared him for these challenges as well.

With some of the other assets discussed, it was less clear whether they indicated innate aptitudes or simply long-term habits, attitudes, or ethics. Most notably, discussants emphasized the indispensable importance of extremely hard work, more specifically long hours, consistent with the aforementioned deliberate practice model. Participants described having, for the course of their careers, customarily invested extraordinary amounts of time on their work, almost always a minimum of 50 to 60 hours a week, frequently as much as 70, 80, 90 or 100 hours, for sustained periods. This again is consistent with Ericsson’s concept of deliberate practice, wherein there is no substitute for years of hard work [2]. Dr. Smith nicely captured the centrality of this by contrasting it with the innate intelligence explanation:

*here’s the one that separates the men from the boys [or the women from the girls], you have to be willing to work twice as hard as everyone ... [Those who excel] may not be smarter than the average person in the field but [they] certainly work harder than the average person.*

Other assets, whether reflecting innate aptitude or merely habit, reflected the central importance of hard work and long hours but seem to have implied some interesting qualifiers, assets that made huge volumes of work manageable and effective. Such was the case with the asset emphasized most consistently by Dr. Baker, who repeatedly stressed impeccable organization obtaining and making the most out of opportunities. By high school, her organizational skills had earned her a reputation as “a competent person and a very good organizer [who could] organize things and get things together and follow through on whatever [she] said [she] was going to do.” This links organizational skills to accountability and dependability, something that, in her view, proved to be critical in affording opportunities over multiple decades of practice through a reputation of dependability. Underlying this, she felt, was the role of organizational skills in facilitating the production of comprehensive, succinct, and relevant reports on time. A strong organizational system made it possible to review thousands of pages of material with acute attention to detail, obtaining “all the information after the first time.” Similarly, she identified exceptional organization as a requirement for taking advantage of certain opportunities, such as proximity of office space to clinical space, which she felt could save time and afford flexibility only if one is “very well organized.”

Another asset, this one palpable in all of the discussions, was the apparent drive to learn, to expand understanding of the field, and to face and master new challenges. All those we spoke with expressed strong intrinsic interest in the subject matter. Dr. Rousseau described how this facilitated the accomplishment of what might look like an excessive workload to the outside observer, saying “even though I have worked hard, it has never been much of a chore, to be honest.” These practitioners’ love of the work may plausibly help explain how they managed to do so much of it—they simply wanted to. Critically, this also facilitated their maximal exploitation of opportunities. For instance, this is reflected in Dr. Gatsby’s

taking advantage of unusual casework to better understand how evaluations in rare or unique scenarios have and can be approached, by tracking down cases, law review articles and academic literature. Similarly, this can be seen in Dr. Smith’s commitment to expansive and complementary expertise through the acquisition of graduate degrees in health and social sciences. A steady, long-term drive to engage with and understand not just the field proper but also a range of overlapping biological, social, and legal knowledge domains arguably allowed these practitioners to excel, not just in attaining recognition, but in advancing the perimeter of the field’s knowledge base.

## Conclusions

In this article, we have presented some of the features of advanced or excellent practice in forensic psychiatry based on our interpretation of the perspectives of six highly experienced and accomplished practitioners. We have also highlighted some of the factors that may be important in developing toward higher levels of expertise and distinction. Regarding features of advanced practice, we have emphasized three themes. These are:

1. integrative capacities, the kinds one needs to get a feel for, so to speak: achieving and maintaining an optimal intersubjective distance between oneself and others (e.g., balancing neutrality with forensic empathy);
2. balancing comprehensiveness and succinctness in the forensic report; and
3. thinking legally.

Regarding the determinants of excellence, we also emphasize integration as a key theme. Whether by innate abilities, the experts we spoke with highlighted some key assets (e.g., stable, enduring behaviours and inclinations) that seemed to serve them well. While all entered practice at a good time and as such enjoyed opportunities, they worked a lot. Undoubtedly, intelligence played a role, though this was not generally emphasized, except in

connection with language-based reasoning by one of the experts.

Other assets on which more emphasis was placed included social skills, love of the work, and organizational skills. We argue that these widely applicable abilities were particularly significant to fulfilling the forensic psychiatric role and flourishing in one's career.

We interviewed the people who have inspired me (Glancy) during my career. We would hope that those embarking on a career in forensic psychiatry can emulate these characteristics. What was clear is that if an early career forensic psychiatrist has a passion for forensic psychiatry they will put in the hours of deliberate practice that is necessary to become an expert in the field. As we have expressed elsewhere [7], our recruits are getting better, and we are developing new models for giving better feedback [8]. Despite the important distinction between excellence and success, we assert that the two can be viewed as mutually reinforcing and, to some extent, achieved through complementary skill sets.

**Conflict of Interest:** none

## References

1. Assarroudi A, Heshmati Nabavi F, Armat MR, Ebadi A, Vaismoradi M. Directed qualitative content analysis: The description and elaboration of its underpinning methods and data analysis process. *Journal of Research in Nursing*. 2018;23(1):42-55. <https://doi.org/10.1177/1744987117741667>.
2. Ericsson KA, Krampe RT, Tesch-Romer C. The role of deliberate practice in the acquisition of expert performance. *Psychol Rev*. 1993;100(3):363-406. <https://doi.org/10.1037/0033-295X.100.3.363>.
3. Gardner H. Why would anyone become an expert? *Am Psychol*. 1995;50(9):802-803. <https://doi.org/10.1037/0003-066X.50.9.802>.
4. Macnamara BN, Hambrick DZ, Oswald FL. Deliberate practice and performance in music, games, sports, education, and professions: A meta-analysis. *Psychol Sci*. 2014;25(8):1608-1618. <https://doi.org/10.1177/0956797614535810>.
5. Berliner DC. Learning about and learning from expert teachers. *International Journal of Educational Research*. 2001;35(5):463-482.
6. van de Wiel MW, Van den Bossche P, Janssen S, Jossberger H. Exploring deliberate practice in medicine: How do physicians learn in the workplace? *Adv Health Sci Educ Theory Pract*. 2001 Mar;16(1):81-95. <https://doi.org/10.1007/s10459-010-9246-3>.
7. Glancy GD. The case for progress in forensic psychiatry. *J Am Acad Psychiatry Law*. 2020 Mar;48(1),7-11. <https://doi.org/10.29158/JAAPL.003908-20>.
8. Booth B, Chatterjee S, Watts J, Glancy G. Towards a new model of training in Canadian forensic psychiatry. *J Am Acad Psychiatry Law* 49: In Press, 2021. <http://jaapl.org/content/early/2021/05/20/JAAPL.200112-20>.

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