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RESEARCH ARTICLE

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"Complexity, safety and challenges: Emergency responders' experience of people affected by methamphetamines"

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Abstract

Providing care to methamphetamine-related callout events in the prehospital environment is often complex and resource-intensive, requiring staff to manage agitation and violence-related side effects of methamphetamines. In Australia, emergency responders are increasingly required to attend events related to methamphetamines, even though reports suggest methamphetamine use across Australia has declined. The aim of the study was to explore Australian police and paramedic experiences attending methamphetamine-related events. A qualitative descriptive phenomenology design was employed using semi-structured interviews with employed police (10) and paramedics (8) from Australia. Data were analyzed using thematic analysis. Participants described the complexities associated with providing prehospital care to people affected by methamphetamines. Participants described associated domestic/family violence, increased levels of violence, challenges with communication, and responder emotional and psychological distress and physical injury. Violence associated with methamphetamine use is a critical factor in prehospital care. Workplace violence and family/domestic violence are important issues that require further research to ensure families and staff are well supported and have the services they need to continue responding to people affected by methamphetamine use.

KEYWORDS

emergency responder, methamphetamine, paramedic, police, prehospital, qualitative research, substance-related disorders

Key points/Relevance to clinical practice

- Responding to methamphetamine intoxication involved complex situations, with added safety concerns and challenges reported by emergency responders.
- Emergency responders working in areas where violence and aggression may be experienced need to know and practice strategies to minimize the risk, such as identification of behavioral cues (agitation, outbursts, intimidation, and breaking furniture), co-attendance (police and paramedics), scene safety (situational awareness), and maintaining a safe exit.

- Violent and aggressive behaviors displayed by people affected by methamphetamines will continue to impact frontline nursing staff and emergency workers. Further research in this area is required to determine the best models of care for managing violence in prehospital and health care settings before restrictive practices can be phased out entirely.

1 | INTRODUCTION

In Australia, amphetamine use is reportedly declining (decreasing from 3.4% in 2001 to 1.3% in 2019). Despite the decline, a large number of people (50%) who use drugs have moved to using the crystallized form of amphetamines—methamphetamine, also known as ICE—and hence the use of ICE has increased (Australian Institute of Health & Welfare, 2022). Australia is the third highest consumer of methamphetamines, and people in regional areas consume more methamphetamines than their metropolitan counterparts (Australian Institute of Health & Welfare, 2022). Reported harms associated with methamphetamine use are increasing (Stuart et al., 2020). Workplace violence has reportedly increased in the emergency environment; of these incidents 38.3% were related to methamphetamines (Nikathil et al., 2018).

2 | BACKGROUND

Violence related to methamphetamines is complex and associated with various factors, including the systemic dynamics of drug use (engaging in criminal behavior to fund drug habits) and pharmacological effects of methamphetamines, such as aggression, violence, mental health side effects, or acute behavioral disturbance (Brecht & Herbeck, 2013; Isoardi et al., 2018). In Australia, the number of ambulance attendances related to methamphetamine use increased from 768 in 2011–2012 to 2514 in 2016–2017, with a significant increase noted in regional areas (Jones, Usher, & Woods, 2019). This same study reported a substantial rise in co-attendance (police and paramedics). Co-attendance for methamphetamine-related events rose significantly in 2011–2012 from 21.6% of methamphetamine-related events requiring co-attendance to 46% in 2016–2017 (Jones, Usher, & Woods, 2019). Additionally, methamphetamines accounted for 10% of all Australian drug-related hospital presentations in 2019–2020, an increase from 6.9% in 2015–2016 (Australian Institute of Health & Welfare, 2022). However, Fry et al. (2021) report a 7% decrease in the number of presentations during COIVD in one Australian jurisdiction. Despite this rise in co-attendance and concern in the prehospital and emergency department (ED) environments, there is a dearth of research exploring Australian emergency responders' experience. Exploring their experiences will add much needed knowledge, identify areas of future research, and assist with service and resource allocation.

Emergency responders are an integral part of the interdisciplinary approach to health care. It is therefore important to understand their experience in the prehospital setting to help guide health care delivery. Emergency responders or first responders are personnel involved in the initial response to life-threatening or traumatic emergencies, such as police officers, paramedics, and firefighters (Commonwealth of Australia, 2019). While police and paramedics are separate services, they are often required to co-attend callout events related to methamphetamine intoxication (Jones, Usher, et al., 2019; Jones, Woods, et al., 2019); hence, this study aimed to explore the experience of Australian police and paramedic emergency responders.

2.1 | Research question

What are the experiences of police and paramedics responding to people affected by methamphetamines who require transport to an ED?

3 | METHODS

3.1 | Design

This present study used a descriptive phenomenology design, which allows the researcher to explore the phenomena from the lived experience of the participants (Lopez & Willis, 2004; Willis et al., 2016). This paper is part of a larger doctoral study that employed a sequential mixed method design and incorporated two phases of data collection to quantitatively describe methamphetamine-related presentations to EDs and qualitatively explore the impact of methamphetamine-related callout events on emergency responders. Phase two, reported herein, collected qualitative data using semi-structured interviews to explore the experience of emergency responders responding to people affected by methamphetamines.

Recruitment occurred via two methods: (i) participants who completed a survey (from phase one of data collection in this research project) indicated their willingness to be interviewed; or (ii) participants responded to a social media advertisement using a purposeful sampling technique. Data were collected over 14 months, from May 2019 to July 2020. Participants were required to meet the inclusion criteria to participate in the study: (i) having experience responding to people affected by methamphetamine who required transport to an ED; and (ii) working currently as a police officer or paramedic in Australia. No participant was known to the research team before recruitment.

The University of New England's Human Research Ethics Committee granted permission to conduct the research (HE18-209). Information sheets, consent forms, and interview questions were emailed to interested participants before enrolment in the study. Participation was voluntary, and all participants gave written consent to participate,

TABLE 1 Example of interview schedule

Can you tell me about your experiences responding/managing people under the influence of methamphetamines requiring transport to an ED?
Can you discuss the nature of difficulties you have experienced when responding to people under the influence of methamphetamines and how they differ from other drugs or mental illnesses?
What are some of the reasons or issues you are called out to persons under the influence of methamphetamines?
Can you talk about what may help you manage/care for offenders/patients under the influence of methamphetamine-related presentations better? Is there any further training or education you feel you need to help you manage clients/patients under the influence of methamphetamines?

ED, emergency department.

and consent was also confirmed at the interview. Consent included the use of de-identified quotes, dissemination of research, and digital audio recording of the interview for transcription.

3.2 | Data collection

This study employed semi-structured interviews conducted by telephone at a convenient time for the participant. Information on participant characteristics (location worked [rural/remote or metropolitan], field of work [police or paramedic], and gender) was collected. The semi-structured interview questions were designed to develop a deeper understanding of police and paramedic experiences responding to people affected by methamphetamines, using knowledge gained from the survey phase and previous research in the field (Kallio et al., 2016). This ensured the research team was able to follow up on issues emerging from the survey and provide the participant with opportunities to share their experiences (DeJonckheere & Vaughn, 2019: Kallio et al., 2016). Table 1 presents the interview schedule.

The first author, an experienced registered nurse, conducted all interviews. Interviews were audio-recorded and transcribed verbatim and checked against the audio recording for accuracy before data analysis. Data collection continued until the research team was confident data saturation had occurred (Fusch & Ness, 2015; Nowell et al., 2017). Four-hundred five minutes of data were collected from 18 participant interviews (average of 22.5 min). Table 2 provides a breakdown of participant characteristics and work location.

3.3 | Data analysis

A professional transcription company, approved by the university, transcribed all interviews. Transcriptions were checked for accuracy by the first author and sent to participants for review; one participant provided further clarity and comment. This study employed thematic analysis, an

TABLE 2 Participant characteristics and location of employment

	Rural/remote	Metropolitan	Both
Police ($n = 10$)	3	7	
Paramedics ($n = 8$)	2	3	3

acceptable method of understanding participant experiences and searching for common meaning (Kiger & Varpio, 2020). Thematic analysis allows the researcher to describe the participants' lived experience through the generation of codes and themes directly from the data (Lopez & Willis, 2004; Sundler et al., 2019), which fits with the descriptive phenomenological design of the study. The advantages of using thematic analysis include a flexible approach to identifying patterns and meaning, and to providing a detailed account of the data results (Clarke & Braun, 2017; Nowell et al., 2017). However, the flexibility of thematic analysis can be a disadvantage with the generation of codes being inconsistent or incoherent (Nowell et al., 2017). Hence the research team followed a six-step process to ensure consistency and in-depth data analysis (Clarke & Braun, 2017) and identify codes and group codes under common themes (Clarke & Braun, 2017; Nowell et al., 2017).

The first author reviewed the transcribed interviews to gain familiarity with the data and remove any identifying material before manually generating codes. The transcribed interviews were read multiple times while listening to the audio recordings to ensure the initial codes were valid, and the participants' voices were heard (Greenwood et al., 2017). The research team discussed the initial codes before electronically coding in NVivo. The research team grouped the codes to identify the overarching theme, main themes, and subthemes until a consensus was reached, ensuring rigorous data analysis occurred (Nowell et al., 2017). Police and paramedic responses for each theme were compared to determine similarities and differences for the purpose of reporting. Two main themes were identified and are presented in separate papers—of which this is the first—due to the depth and richness of the data and to do justice to participants' voices; reporting the findings in a single article would have provided a superficial analysis of participants' experiences (Jackson et al., 2014; Janghorban & Azarkish, 2019).

4 | FINDINGS

Analysis revealed that responding to people affected by methamphetamines was complex. Complexity was associated with responding to violent and dangerous situations, which increased challenges and safety concerns, and callout events were more than just drug-related, often involving complex social issues and families in crisis. This is reflected in the overarching theme: "Ice: Complexity of care challenging police and paramedic emergency responders." The two main themes, (i) "Responding to violence, abuse, and danger"; and (ii) "More than just drug-related callout events," highlight the challenges police and paramedics experience in the prehospital environment as emergency responders.

The current paper presents the findings from the first theme, "Responding to violence abuse and danger" (shaded in blue in Table 3), and provides a detailed narrative account of participants' experiences responding to methamphetamine intoxication, and of the identified safety concerns and challenges. The following sections will elaborate on the three subthemes: (i) "A focus on safety: Protecting yourself and unsafe environments for families"; (ii) "Minimizing the risk: Responding to violent, abusive behavior"; and (iii) "Challenges responding to methamphetamine intoxication." Participant quotes are used to emphasize the findings. For each quote, PA represents a paramedic participant and PP represents a police participant.

A subsequent paper will present the findings of the second theme, "More than just drug-related callout events." Table 3 presents an overview of the overarching theme, and the main theme and subthemes presented in each paper.

4.1 | A focus on safety: Protecting yourself and unsafe environments for families

People affected by methamphetamines often experience adverse side effects such as behavioral changes and mental illness. As reported by emergency responders, behavioral changes and/or mental illness added to the complexity and increased the safety concerns when responding to people affected by methamphetamines. There were two main areas of safety concern: personal safety and the safety of the person's family.

Behavioral changes included unpredictability, uncooperativeness, and verbal and physical violence. Unpredictability was reported as a common theme; participants described people presenting as reasonable or cooperative one minute and unreasonable the next. This rapid change made responding to people affected by methamphetamines difficult due to an inability to predict and control the situation:

> One minute, they can be talking to you almost holding eye contact, be generally a reasonable conversation. The very next second, they can be spitting at you, trying to launch themselves out of the back of the ambulance, launch themselves at you … the one word is unpredictability that I associate with methamphetamine patients versus anyone else. (PA13)

This unpredictable, rapidly changing behavior could also escalate to verbal violence followed by physical violence. Participants reported the violence displayed by this cohort of people was excessive and getting worse over time:

> The violence seems to be escalating in relation to meth users…. It was extremely difficult. Obviously, the extreme violence that they display once you have to deal with them. (PP1)

Police and paramedic participants felt there was a correlation between methamphetamine use and mental illness. Paramedics reported they responded to fewer callout events related to mental illness alone. Most callout events were either people with a history of mental illness or drug/substance use that resulted in mental health issues.

> It would be frequent that we go to Ice-affected patients who also have at least some element of longer-term mental illness … makes them a bit more complex and a bit higher risk from our perspective. (PA18)

Mental illness in people using methamphetamine was often related to the drug's adverse side effects, for example, sleep deprivation and mood alterations. Police and paramedics both reported commonly seeing depression, anxiety, hallucinations, paranoia, and excited delirium/psychosis in persons affected by methamphetamines.

> I guess specifically with methamphetamine intoxication, my experience…. They can be quite compliant and wanting to get some help, having had weeks of no sleep and no support … heightened moods, heightened emotions, just thinking, they have agitation and paranoia, sleep deprivation and things like delusions, psychosis, hallucinations, and fluctuating consciousness. (PA16)

Police and paramedic participants reported an element of fear when responding to situations involving people affected by methamphetamines. Police felt a higher risk to their safety when responding to people affected by methamphetamines compared with other drugs. PP1 shared how they felt when responding to people affected by methamphetamines:

TABLE 3 Methamphetamines: Complexity of care

Overarching theme	Themes	Subthemes
ICE: Complexity challenging police and paramedic first responders	Paper 1: Responding to violence, abuse, and danger	A focus on safety: Protecting yourself and unsafe environments for families.
		Minimizing the risk: Responding to violent, abusive behavior
		Challenges responding to methamphetamine intoxication
	Paper 2: More than just drug related callouts	Methamphetamines addiction: Crises and social issues
		Understanding: Challenging stigma
		Care coordination & care environments

> I'm frightened. I won't lie about that. The adrenalin is pumping and you just don't know how it's going to turn out. I will deal with it and wrestle with people … with meth you are just concerned about your safety and concerned about other officer's safety because it is so unpredictable.

Fear for personal safety was reportedly due to the unpredictability and inability to control dangerous and violent situations. Police participants reported an increased chance of experiencing physical assault and the perceived need to use force to manage the situation. PP8 recalled an incident where they were physically assaulted and used force to control the situation:

> He was sitting down on a chair and he was sitting there, kind of shaking, knees were shaking, arms were shaking. It looked like there was a bit of contained aggression there, but otherwise he seemed okay with us. We informed him he was under arrest for aggravated armed robbery…. He stood up and pretended to put his arms behind his back and then all hell broke loose. Me and my partner have wrestled him out the front door and he started hitting us and … then he's taken off on foot. I've had to chase him … quite a distance and he's turned around and punched me and I've tasered him…. Then wrestled on the ground and he's punched me in the face and hit me in the guts.

Experiencing violence resulted in emotional and psychological distress in addition to physical injury. Paramedic participants reported experiencing indirect threats, a physical threat with a weapon, and verbal abuse as additional forms of violence and aggression when responding to people affected by methamphetamines, summarized by one paramedic as

> verbal, physical threat and assault, as well as threat of weapons from patients and sometimes bystanders. Indirect threats are things like you're being hunted down and raping your wife and killing you, there's a whole range of experiences there…. Probably just the personal or emotional harm though in addition to potential physical injury they were at risk of emotional and psychological distress … direct verbal threats or physical injuries. (PA16)

Family safety was a concern due to domestic and family violence reported by police and paramedic participants. Police reported seeing increased levels of domestic violence in areas where methamphetamine use was prevalent.

> He had taken some meth … gone in and started beating up his family … his girlfriend and his mum and his dad. … We got called there…. He was throwing furniture all around the house; caused quite an extensive amount of damage to the property…. It took two of us, myself and my partner at the time…. A lot of verbal and physical fighting to get him under control…. So that one was just pretty nasty in the fact it was … a lot of damage. Some pretty nasty injuries to some of the family. (PP5)

Children were sometimes involved. Police reported in these situations, skilled tactical communication was required, taking longer to control the situation and extending the risk duration to the child.

> When we arrived, he come at us with a knife and a baby in his arms…. I spent about three-quarters of an hour talking him down. We couldn't use any of our force options obviously, because of the baby…. So, everyone's safety is at the top of our minds … my tactical communications is what we call it—talking with him and breaking the situation down. (PP9)

4.2 | Minimizing the risk: Responding to violent, abusive behavior

Police and paramedic participants reported following safety policies and procedures to manage some of the risks. Managing risks included co-attendance (police and paramedic), ensuring pre-checks are completed before arrival, scene safety, situational awareness, and minimizing contact.

Paramedics reported more frequently relying on police to co-attend with them to help reduce the safety risk. Paramedics would remain a distance from the scene and assess the risk; if the threat were deemed be too high, they would call for police co-attendance,

> We're taking far fewer risks with these patients, and we are regularly now—whilst we drive to these cases almost automatically, not quite automatically but very close to automatically requiring the attendance of police with us. (PA18)

Police reported they called paramedics to co-attend and assist with transport due to the person's risk of self-harming or sustaining an injury during transport. PP5 shared their experience trying to transport people affected by methamphetamines:

> So with us it just means that they're fighting … in the back of the pod, and they're banging their head against the pod or they're smashing their feet or kicking…. So we try and avoid using the police vehicles for their own safety so they don't damage themselves.

Police reported using pre-checks to assess the risk before they arrived on the scene. However, even with pre-checks, it was impossible to identify or preempt all dangerous situations involving people who have used methamphetamines.

> We always obviously do our checks before arriving.... You just don't know when or where any situations are going to occur. It could be in a park. It could be when you do a vehicle stop.... If they've got firearms. Their previous history. They have warnings on our systems. But if we get someone that we don't know... (PP1)

Paramedics reported scene safety and situational awareness were essential when responding to or transporting people affected by methamphetamine. Normal processes with scene safety included ensuring an accessible exit (from either the room or the vehicle) in case of escalation and need for a rapid withdrawal. In addition, some paramedics reported limiting physical contact with their patients as a way of protecting themselves. PA14 shared their strategies for minimizing the safety risk when responding to people affected by methamphetamines as follows.

> It's down to scene safety more than anything ... always an easiest route out of a scene.... That they don't end up boxing themselves into a room ... with a paranoid psychosis patient in between them and an exit point ... it's desperately trying to manage the physical contact with these patients, who are quite likely to suddenly explode with a whole lot of aggression.

Situational awareness included being mindful of the environment and equipment they carried on themselves, ensuring there wasn't anything within easy reach that could be used as a weapon.

> They've tried to grab scissors out of my shirt, they have tried to grab scissors off the ... in the back of the ambulance off one of the trays, so we've had a rethink about how we, or certainly have had a think about what I carry with me and what's easily accessible by people, if they want to grab something. (PA13)

Paramedics reported extra support was helpful when responding to violent, abusive, and dangerous situations. Additional support included intensive care paramedics, clinical support officers, and operational officers. These services include additional experience in chemical sedation, airway support, and managing violent behavior.

> The policy is that if they believe there's an acute behavioral disturbance they'll often require a clinical team leader, such as a critical care paramedic, to also respond. If there are significant violence concerns, we also have the capacity to send an operational supervisor.... When an operational supervisor arrives, the discussion is about the risk assessment and possibly being able to manage it ourselves without having police attend. So that can be crew intensive, it just depends on the situation. Effectively you can imagine just a two-person crew plus perhaps a single responding clinical care paramedic, plus or minus the operational supervisor who works by themselves. (PA16)

4.3 | Challenges responding to methamphetamines intoxication

Responding to people affected by methamphetamines was identified by participants as challenging, which added to the complexity of these callout events. Challenges that increased the complexity included an inability to communicate effectively, determining if the person was experiencing drug adverse side effects or an underlying medical condition, and issues with physical restraint and chemical sedation.

Both police and paramedics reported an inability to communicate effectively with people affected by methamphetamines. Police participants found people affected by methamphetamines were challenging to communicate with as the drug impacted the person's ability to concentrate and often resulted in repetitive speech.

> A lot of them are very unfocused, very fidgety. They repeat themselves a lot when they're talking ... they find it very difficult to maintain any eye contact. Their movements are very sporadic and it's very difficult to predict what they're going to do or how they're going to move. (PP5)

Paramedics reported ineffective communication affected care decision-making due to an inability to complete a full assessment. Assessment and history were considered paramount to providing proper medical care and essential knowledge before administering any form of chemical sedation. Paramedics were conscious of this issue and tried to mitigate the impact this had on patient outcomes,

> just because someone is high on meth doesn't mean they're not having a medical episode.... Your ability to assess a patient is paramount ... to make sure that they haven't been injured in a fall or an assault leading up to us needing to be involved in transporting them and that sort of thing. We still need to be vigilant to make sure that those things have been accurately assessed and managed and that means we have to take all that into account when we consider any use of chemical or physical restraint and how we apply those and monitor for ongoing patient wellbeing. (PA17)

Callout events related to methamphetamines were challenging for police due to difficulty determining the cause of the person's behavior. Police reported it was difficult to determine if the person was drug-affected or whether they had an underlying medical or mental illness that required medical attention.

> So, now if we have someone who's under arrest under the Mental Health Act, say who's high on meth and just going nuts and thinks they're god or whatever, then we'll transport in the ambulance in the first instance, and then use a paddy wagon [in the] second. The hard point is trying to find the line between, is this person crazy enough that they need to go to the hospital … or are they just on meth and we're going to bring them back and talk to them about stealing that they did two days ago? (PP8)

Paramedics reported a similar finding as the police, in that the effect of methamphetamines could mask other medical conditions, or medical conditions could be mistaken as drug side effects. This has the potential to result in a delay in medical care or incorrect diagnosis.

> We had a patient recently with … meningitis B … that was a patient that was bouncing around the room … she is a known IVDU [intravenous drug user] … highly suspected she had been on meth, however, the way she presented was not exactly the same and it turned out that … she had meningitis. (PA13)

Additionally, paramedics report they were not just treating the medical condition or trauma/injury but had to consider and manage the adverse effects of methamphetamine on the patient's body systems (particularly the cardiovascular and respiratory systems).

> They've had an accident or it's—they've hit themselves, or self-harmed. Then you've got secondary—or maybe primary—problem of the injury or the exacerbating illness, then you've got the meth on board as well. So if someone's ticking away at 160, 170, and their blood pressure's through the roof and they're highly agitated, then I guess I've got concerns, because I don't know what else they suffer from and are they going to have a stroke? (PA15)

Physical restraints limited the paramedics' ability to assess and monitor the person and could delay recognition of deterioration. Paramedics also reported physical restraints were challenging to apply, especially if the person was uncooperative or violent.

> Sometimes it's difficult to cardiac monitor them because of the net and how much they move around, it often dislodges the dots … our safety nets, safety blankets … call them what you will they're a form of restraint, are not easy or quick to put on. They're cumbersome and often the patient is fighting a lot of the time whilst it's being put on, which makes it difficult to apply and to apply properly. (PA17)

Due to people affected by methamphetamines being less cooperative, police and paramedic participants reported the need for chemical sedation. Chemical sedation was challenging: it took time to work, and it was difficult to get the balance of sedation right. A balance was needed between enough sedation to calm the person but not too much so that the person deteriorated medically.

> Two or three policemen basically holding this person down, asking … telling us that we're taking them under the Mental Health Act and we needed to sedate this patient to go to hospital. They were wrestling this patient on the ground. We're trying to get in there with a big sharp needle risking needle stick and all sorts of things to sedate this patient … then we could put them on a stretcher … we're still actively trying to manage their medical condition as well in case if they deteriorate … with their airway. (PA11)

Paramedic participants reported chemical sedation was becoming an automatic response due to previous experience with violent and dangerous situations.

> There's just been too many instances of significant violence and quite violent difficult confrontations without the assistance of other agencies. So, I guess the idea of both requesting that assistance but also from a clinical perspective escalating to chemical restraint quite quickly is almost a baseline behavior I guess for many paramedics. (PA18)

5 | DISCUSSION

This study is the first to explore the experiences of police and paramedics in responding to people affected by methamphetamines in the prehospital environment. As a result, we cannot compare the findings of this study with previous Australian research. Overall, the findings suggest responding to persons affected by methamphetamines is complex. Complexity was related to the challenges and safety concerns responding to violent and dangerous situations.

This study reported that violence, aggression, and mental illness side effects impacted participants' perceptions of safety risk. These results are well documented by previous research (Cleary et al., 2017; Jones et al., 2018; McKetin, 2018; McKetin et al., 2014; Usher et al., 2017). A study conducted on health care professionals in the ED by Usher et al. (2017) reported similar findings: behavior escalated rapidly, patients were less compliant, they displayed aggressive and violent behavior, and such violent/aggressive behavior increased staff safety concerns. Minimizing the risk when responding to violence is essential in addressing safety concerns and reducing workplace violence in the prehospital environment. Previous research has reported similar findings on the topics of minimizing risk, co-attendance (police and paramedics), scene safety, engaging in violence prevention training, development and instigation of

violence intervention programs, and situational awareness (Allen et al., 2019; Murray et al., 2019). In addition, the importance has been pointed out of knowing and identifying behavioral cues (agitation, aggressive outbursts, intimidation, and breaking furniture), which may be precursors to violence and need to be managed early to prevent potentially unsafe situations (Spencer et al., 2018; Usher et al., 2017).

Emergency responders, mental health facilities, and EDs often use chemical sedation (chemical restraint or rapid tranquillization) to manage violent and aggressive patients (Muir-Cochrane et al., 2020; O'Connor et al., 2019), which was confirmed by participants included in this study. Patients with excited delirium/psychosis who are aggressive, violent, or combative (not cooperative) have an increased risk of asphyxiation, overheating, hyperthermia, and occasionally death (O'Connor et al., 2019). Chemical sedation and physical restraint together reportedly help to bring on a state of calm, helping to minimize the safety risk for staff and the patient (Muir-Cochrane et al., 2020). However, these forms of restraint are not without risks, with airway compromise, respiratory depression, and arrhythmias (dependent on the chemical used and the amount given) reported as complications (O'Connor et al., 2019). As this study has shown, getting the dose of chemical sedation right and struggling to administer the sedation to less-cooperative patients can be difficult. There is also a lack of consensus on the most effective form of chemical sedation to use in the prehospital environment (Muir-Cochrane et al., 2020). This adds to the challenges emergency responders experience when responding to people affected by methamphetamines. In addition, the use of restrictive practices is considered a source of emotional distress to staff and can be traumatizing (Power et al., 2020), and clients who had experience with restrictive practices reported feeling disempowered and angry towards staff (Lawrence et al., 2022).

There has been a push to reduce the use of restrictive practices (chemical and physical restraint) as a management option (McKenna et al., 2017; Power et al., 2020) in favor of a more person-centered approach to care (Gaynes et al., 2017). De-escalation is seen as an alternative to restrictive practices, with de-escalation aiming to calm the situation through verbal and non-verbal communication (Spencer et al., 2018). However, participants in this study reported experiencing challenges communicating with people affected by methamphetamines, which impacts the effectiveness of de-escalation techniques. Recent Cochran reviews also report limited quality research available to support the implementation of de-escalation as a management strategy for people with aggressive and violent behavior (Du et al., 2017; Spencer et al., 2018). Further research in this area is required to determine the best models of care for managing violence in prehospital and health care settings before restrictive practices can be phased out entirely.

6 | STRENGTHS AND LIMITATIONS

Recruitment for this study attempted to enroll both female and male participants across different areas across Australia; however, only male police officers and paramedic staff emailed the research team to participate. The participants were recruited from a mix of rural, remote and metropolitan areas in Australia. In addition, small sample size, and self-selection for participation may have affected the sample's representativeness and selection bias. As a result, these findings may not be generalizable to the broader population of emergency responders. Although the number of participants was not large, data collection continued until data saturation occurred, establishing the rigor and trustworthiness of the data. All participants had experience responding to people affected by methamphetamines. However, participants' perceptions of the negative effect of methamphetamines potentially influenced their responses and may have contributed to recall bias. Furthermore, identifying drug use is complex and relies upon the clinician's experience in recognizing signs of drug use, and/or open disclosure of drug use. As a result, we are unable to guarantee all experiences shared were directly related to methamphetamine use.

7 | CONCLUSION

A key outcome of this study was an understanding of the complexity that is due to the challenges and safety concerns in responding to methamphetamine-related violence, abuse, and danger. Minimizing the risk when responding to violence is essential in addressing safety concerns and reducing workplace violence in the prehospital environment and emergency and acute care settings. Chemical sedation and physical restraint are often used to manage violence and aggression; however, their use is contentious as they cause additional risks and have the potential to result in untoward medical events for patients (asphyxia, over-heating, hyperthermia, airway compromise, respiratory depression, and arrhythmias). Further research in this area is required to determine the best models of care for managing violence in prehospital and health care settings before restrictive practices can be phased out entirely.

AUTHOR CONTRIBUTIONS

Study design: Rikki Jones, Cindy Woods, Kim Usher. Data collection: Rikki Jones, Kim Usher. Analysis: Rikki Jones, Debra Jackson. Manuscript preparation: Rikki Jones, Kim Usher, Cindy Woods, Debra Jackson.

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CONFLICT OF INTEREST

The authors declare there are no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

AUTHORSHIP STATEMENT

All authors have met the authorship criteria and are in agreement with the submission and content of this manuscript.

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