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TITLE: Safety, Risk and Aggression: Health Professionals Experiences of Caring for People affected by crystal methamphetamine (ICE) when presenting for Emergency Care.

ABSTRACT

The crystalline form of methamphetamine, commonly known as crystal meth or 'ICE' is a highly addictive and powerful stimulant. Users of crystal meth often require emergency care, and are associated with a substantial burden of care by emergency care providers. In this qualitative study, we report findings from semi-structured interviews conducted with health professionals (n=9) about their experiences providing care for patients affected by ICE and presenting to the emergency department. Safety and aggression management was revealed as a major aspect of care provision for these personnel, and a major theme: 'Staying safe' was revealed. 'Staying safe' described experiences of participants being exposed to potentially unsafe situations, and their responses to the challenging behaviours and aggression participants encountered when caring for these patients. Our findings highlight the need for ED staff to understand the nature of ICE use and its adverse impact on the mental and physical health of users. Furthermore, it is clear that establishing and maintaining safety in the emergency care setting is of utmost importance, and should be a priority for healthcare managers.

KEY WORDS: aggression, emergency departments, ICE, crystal methamphetamine, violence

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INTRODUCTION

The crystalline form of methamphetamine commonly known as 'ICE' is a highly addictive and powerful stimulant that is widely used in many countries (Heilbronn, 2013; Pasic, Russo, Ries, & Roy-Byrne, 2007; Pluddemann, Flisher, McKetin, Parry, & Lombard, 2010; Pomerleau et al., 2012; Tompkins-Dobbs & Schiefelbein, 2011). Proportionally, methamphetamine use in Australia is higher than in any other country with more than 200,000 Australians reported using 'ICE' in 2013 (compared with fewer than 100,000 in 2007), with figures noted to be conservative and already dated (Commonwealth of Australia, 2015).

ICE is a very potent stimulant and can produce psychological disturbances or violent and aggressive behaviours (Commonwealth of Australia, 2015). Methamphetamine use has been associated with a substantial burden of care by Emergency Departments [EDs]. In an Australian study of amphetamine-related presentations to a tertiary hospital ED, 156 (1.2%) of the 13,125 presentations were attributed to amphetamine use (Gray, Fatovich, McCoubrie, & Daly, 2007). ICE users often present for ED care (Tompkins-Dobbs & Schiefelbein, 2011), for various reasons including trauma, physical health complications and acute and chronic medical disorders and behavioural mental health disturbances.

In addition, a retrospective review showed that methamphetamine may be related to 7.6% of psychiatric ED visits (Cloutier, Hendrickson, Fu, & Blake, 2013). In a study of presentations to the ED of a major city hospital, methamphetamine users were reported to be significantly more agitated, violent and aggressive than patients with other toxicology-related presentations and

significantly less alert, communicative and cooperative (Bunting, Fulde, & Forster, 2007). Methamphetamine users were more likely to have a history of intravenous drug use and mental health problems, and Bunting et al. (2007) reported that in their sample, over a third of patients affected by methamphetamine presenting to the ED for emergency care required scheduling under the Mental Health Act 1990 (NSW).

Within health care services, EDs have among the highest rates of violence and aggression (Kowalenko, Gates, Gillespie, Succop, & Mentzel, 2013; Spector, Zhou, & Che, 2014; Wolf, Delao, & Perhats, 2014). Violence in the ED takes various forms and may include physical assault, verbal abuse, sexual assault, intimidation or damage to the environment (Hyland, Watts, & Fry, 2016; Luck, Jackson, & Usher, 2007; Tan, Lopez, & Cleary, 2015). Evidence suggests that aggressive incidents toward staff in the ED environment remains largely unreported (Hogarth, Beattie, & Morphet, 2016). Reasons for this are complex, and are attributed to the time and effort required to report an incident, aggression being an accepted occurrence (Hodge & Marshall, 2007), fear of retaliation and an absence of support by peers, ED management and hospital administrators (Gacki-Smith et al., 2009), and the meanings that individual nurses ascribe to acts of violence against them (Luck, Jackson, & Usher, 2008).

Considerable efforts have been made in trying to understand why this violence occurs, and how it can be predicted, minimised, and eradicated (Jackson, Wilkes, & Luck, 2014; Luck et al., 2008); however, considerable gaps in our understanding remain. In EDs, staff have experienced injuries, acute stress with negative consequences, and lost productivity arising from acts of violence towards them (Kowalenko et al., 2013). The effects of aggressive behaviours not only impact staff health and wellbeing but extend to economic and resource costs that may arise if staff require time off work to recover from these experiences. For some staff, the impact of these

experiences may compromise their capacity to return to the workplace and face these situations again.

These factors underscore the importance of understanding and managing workplace violence and aggression in the healthcare environment, and on identifying and responding to patients more likely to demonstrate violence towards healthcare staff and others. This paper is drawn from a larger study that sought to better understand the particular challenges or difficulties experienced by health services personnel in providing emergency care for people affected by ICE. Previous findings relating to the provision of emergency care to persons affected by ICE have been published elsewhere (XXXX). In this current paper we report findings pertaining to safety and aggression management.

METHODS

The study was approved by relevant University Human Research Ethics Committees (University of XXXX and University XXXX). Health professionals with experience working in EDs were recruited through relevant professional networks, and a form of snowball sampling in which participants shared study information with other eligible colleagues.

Written consent was given, and the same interviewer – an experienced mental health nurse researcher - conducted all interviews over 4 months in early 2016. Interviews were conducted face-to-face or via telephone, dependent on participant location and preference. Questions asked included demographic information about the participant's professional background, and experience working in health and mental health. Other questions explored professional experiences with patients affected by ICE presenting for emergency care; challenges associated with care; and, the treatment and support(s) required.

Interviews were conducted until no new data emerged, that is, until data saturation was reached (Cleary, Horsfall, & Hayter, 2014; Fusch & Ness, 2015). Length of interviews varied between 40 – 90 minutes. Interviews were all digitally recorded and transcribed verbatim and a copy of the transcript was provided to participants who requested a copy.

Data Analysis

Thematic analysis guided the analysis of data (Braun & Clarke, 2006). This approach required members of the research team to examine patterns within the data using a six step process. This process entailed: (1) reading and re-reading the transcripts, and notating the text (2) coding the data in relation to the research question and collating codes and extracts; (3) distinguishing themes; (4) considering themes; (5) specifying and explaining themes; and (6) writing the paper (Clarke & Braun, 2013). This approach enabled the linking of emergent themes to the data (Braun & Clarke, 2006) and supported the research team to clarify and understand the phenomena under study (Rebar, Gersch, Macnee, & McCabe, 2011). Rigour was further enhanced by members of the research team independently coding transcripts and continued review by the team.

RESULTS

A total of nine participants were interviewed, comprising five nurses, two paramedics, a social worker and a psychotherapist. All were experienced clinicians and all had extensive experience of providing emergency care to persons affected by ICE. Participants were drawn from two states in Australia and the majority of participants (n=8) were working in urban areas at the time they were interviewed. They identified safety and management of aggression and behavioural disturbance as major issues in ensuring the best possible emergency care for these complex

patients. Safety and aggression management was revealed as comprising a major theme: 'Staying safe'; that described the experiences of participants in which they were exposed to potentially unsafe situations and the strategies they used to manage in these situations.

Staying Safe

Patients affected by ICE commonly exhibited frightening behaviours that were difficult to manage, encompassing unparalleled physical strength and aggressive, violent behaviour. Participants realised the danger and safety issues this presented. As experienced clinicians, our participants readily recognised the likelihood of these behaviours escalating in ways that could threaten the safety of the environment, and generating the need for additional resources to maintain patient and staff safety. Staff expertise in dealing with these situations was not only underpinned by knowledge and experience, but a duty of care tempered with caring and compassion:

Often when they come in if they're in full blown - well ICE situation I guess, they're incoherent. Some of them I think they'd kill you if they got hold of you. (P5)

Our participants acted to protect the safety of the patient, as well as others in the environment. Participants also acknowledged how they felt about their own personal safety and demonstrated understanding of the implications that any violent or aggressive act would (or could) have for the patient.

we have definitely taken the approach of careful, careful and you go with your gut instinct...I'm not going to even approach them until the police are there.... I don't want to be attacked and I would hate for this person under the influence of drugs to attack me and end up in gaol. (P 7)

Participants described patients requiring emergency care when affected by ICE as often being ‘paranoid’ (P4). ‘aggressive, violent’ (P5), ‘combative’ (P9), and ‘not predictable’ (P8). These challenges were further complicated by the sense patients had phenomenal strength, that made it necessary for staff to ensure adequate back-up help was at hand:

If they're really going off and you have to sedate them, you need really high doses of sedation. They seem to have that ... that superhuman strength about them. I've had a few of those ... very little, petite ladies ... who usually a tiny dose of sedation would be tons, and those kind of people I've found you've had heaps of coppers having to hold them down while you give massive doses of sedation to be able to try and manage them. (P8)

Another participant described the importance of looking at the big picture and being self-aware – she described her experiences of seeing how situations could rapidly escalate; and how escalation could sometimes be prevented by staying in control and not allowing the patient’s actions to fuel the situation.

It's keeping your cool. Quite often they want to pick a fight, so they sit there deliberately pressing your buttons... (P8)

In addition to staying cool and not reacting to provocation, the need to be continually cognisant and alert to the potential for harm, escalation of behaviours and planning ahead as to how any difficulties could be managed was crucial. Strategies underpinned by a calm and cautious demeanour were deemed to be more effective. The context of practice (i.e. in an ED ward or on the road in an ambulance) further influenced the need for considered, planned and decisive action:

their mood is just not predictable, so ... you need to be on your guard ...have a plan, because it [vehicle] is a confined space. If they launch at you, there's going to be quite a

period of time before your partner can pull over, open the doors, get you out of the car.

(P8)

Working within the ED context brought other confronting and potentially dangerous situations. In addition to maintaining their own safety, health services staff also had a responsibility to ensure the safety of other people in the environment, including other service users and those accompanying them. Participants considered rapid and accurate appraisal of the situation to be crucial to maintaining safety for all of these groups. An essential element was identifying and managing risk:

When they come to the department they actually have to be searched by the nursing team.

If they do have any weapons on them, that then gets confiscated and locked up. (P1)

In addition to the patients themselves, those accompanying patients – their relatives and friends – could also be a potential source of aggressive behaviour. When relatives witnessed challenging behaviours, they sometimes became stressed and agitated. Participants reported staff were mindful of this and tried to allay anxiety so as to reduce the potential for any aggression from this source:

I tried to take him [relative] aside and to distract him, in the sense that, security were dealing with the patient and he [relative] was getting in the way, getting more agitated. I had...to explain to him that, we're trying to protect her... You brought her here because you were concerned. (P4)

The behaviours exhibited by ICE users varied between individuals and situations. Each situation was unique in that it was also influenced by the impact of any other substances the patient may have consumed, in addition to other factors such as co-morbidity. Safety issues were further raised because important information that could further influence safety of staff and other service

users, and inform appropriate safety interventions was often lacking. Complete and full information about use of substances is generally not known initially, and this, along with other missing information about a patient's personal background meant that emergency staff were sometimes working in volatile and quite dangerous situations. Aggressive behaviours could quickly escalate, and so they had to be able to quickly identify the potential for aggression, and be ready to respond appropriately.

...we've had nurses who've been punched in the face. We've had security officers who've been kicked and spat at, medical staff as well...violence towards healthcare providers does tend to increase when you have a patient that you can't reason with... That's why we ... use drugs to sedate patients. (P1)

In addition to physical abuse, staff could also be subjected to intimidating and threatening behaviour. Participant 4 recounted such an experience:

Then [patient] mentioned that he was friends with prominent drug dealers in this city, or bkie gangs, and if anyone came close, they'll be killed. He was quite - invading their [staff] personal space, quite difficult to de-escalate...and threatening, intimidating, screaming. (P4)

Different clinical circumstances required different approaches to dealing with aggressive and challenging behaviours. Paramedic participants reported the need for use of restraints when it was perceived that there was no effective alternative to maintain the safety of patient and staff. In the context of emergency transport, sometimes restraint was needed for short periods to ensure the safety of patient and staff:

They're the soft Posey restraints that we've got - the quick release ones...we're just escalating depending on which path to go down, depending on how approachable and communicative the patient is. (P7)

However, despite the need to maintain safety, decision making regarding around the use and the type of restraint was also viewed within the context of patient safety and dignity.

Generally I feel like if someone is restrained and thrashing against restraints, I'll sedate them, because I don't think that's humane, to have somebody tied down and thrashing. I don't think that's okay. (P8)

A complicating factor was that the effect of ICE on patient behaviours and responses was sometimes so severe that sedation could have little effect, or take longer than usual to take effect:

...they [staff] used every sedation under the sun, and they [patient] were still combative and fighting, spitting and all of that behaviour... it's quite traumatising in terms of somebody spitting at you. (P4)

The high volatility meant that participants were fearful of patients at times. There was the feeling that any distraction or loss of concentration could place them, their colleagues and other service users in immediate danger.

Some of them I think they'd kill you if they got hold of you. ...you can't rationalise with them. You can't ascertain how safe they are because well we don't know what's going in their head. (P5)

The availability of backup support by hospital security staff to assist in protecting staff and other service users was considered pivotal. Some facilities had isolation rooms that participants

considered to be an effective element of an overall strategy aimed at maintaining patient and staff safety.

In some of the hospitals, they have like a special room with a mattress on the floor where you know, with no linen or anything so that the people can't hurt themselves. But even that's very undignified - but I suppose it's a bit more safer than having a bed in there and then try to do things to hurt themselves on the bed or with the bed. ... because you can't get near them sometimes. (P5)

However, as suggested by the above narrative, on their own, these spaces were not adequate, and the additional support of police and security staff were also needed on some occasions. These events could be extremely frightening for staff:

It wasn't a human. He [patient] would have killed me... he went berserk. Trashed the ED. They got him over to the seclusion room ... It wasn't a human. I was terrified....., I've never seen this amount of medication ever used and I was absolutely packing it. But this fellow had no ill effects... just imagine what he would have done if he had have got someone, got hold of me. ...they had the police there and they had security on him all night. (P5)

Situations such as that described above by participant five reinforced their vulnerability. Circumstances in which participants were fearful for their lives were not easily forgotten and did not necessarily diminish with repeated exposure. Consistency in the level of support provided varied across hospitals - some provided good support where ambulance staff could ring ahead of time and alert staff as to what to expect. This mechanism allowed some (minor) degree of forward planning, and enabled security to be notified, available and ready to assist when the patient arrived:

...I know that I can phone ahead and that I will have trained professionals that will work together as a team. They will have gloves on and they will know their hold points ... how to safely handle an aggressive, agitated patient. (P7)

Procedures for accessing security staff, and how the security staff roles and procedures were enacted varied across the hospitals. Participant seven described some security personnel as being employed in a strictly ‘hands-off’ fashion – in more of an observational capacity:

... I would have to wait for security. He said I'm sorry, I can't get involved ...he said he was there to document the event... said that he couldn't physically restrain her because that would be assault. (P7)

Not having security close and involved was felt to significantly impact staff capacity to respond effectively to escalating behaviours:

With escalating presentations over the past few years, it would be ideal to have security personnel based in the emergency department. Because, right now, our security is in a different location. (P4)

The onus to report incidents of aggressive and violent behaviour was on the individual health professional. However, these events were not always formally reported as incidents, aside from being noted in the patient notes:

...incidences like verbal abuse and intimidating behaviour - it's not actually recorded as an incident or - it's merely documented on the notes that the person was verbally abusive and threatening. (P4)

Whilst this may be a very appropriate response in some situations, it may also mean that health service managers are not kept fully cognisant of the nature, extent and effect of these incidents. It may also reflect an increasing de-sensitisation to workplace violence and aggression:

... ED nurses sort of desensitise, ...it's just psych patients, this is how they behave if they are upset or they aren't well... when maybe there was an assault or if there is a physical restraint required. Then they [complete the] incident report. (P4)

Staff acknowledged the value of incident reporting none the-less and identified how reports provided a basis for improving practice, and for management to provide more support to these frontline staff. Participants reported some forms of debriefing were available; however, the level of debriefing offered varied across services. Generally, if an instance of physical assault or violence was reported, it led to debriefing. Regular support was also available to some staff in some services:

Every two weeks, we have a session with a psychologist for an hour ... I think we have support for each other too. I think we manage to work well as a team and utilise that as some sort of release. (P9)

DISCUSSION

This study is one of the few to have explored health professionals' actual experiences of providing care to people affected by ICE use seeking emergency care. To our knowledge, the study is unique in that it included a range of health professionals and health services, all from different emergency settings in two states in Australia. Participants all described having regular contact with people using ICE, and all identified challenges in caring for these patients. Staying safe and ensuring the ED remained safe for their colleagues and other service users was a major concern. According to participants, patients affected by ICE who behaved aggressively, usually

demonstrated manifestations of psychosis and unpredictable, hostile behaviours. Individually and collectively, these factors are known to increase the potential for health worker safety to be threatened (Commonwealth of Australia, 2015). Use of crystal methamphetamine is known to adversely impact the behaviour of the user, and effects reportedly include ICE intoxication (irritability, physical aggression, agitation), chronic intoxication (psychotic paranoid state), delirium (disorientation, confusion, fear, and anxiety) and stimulant-induced psychosis (Maxwell, 2005).

In our study, aggressive behaviours were not only shown to be confronting and sometimes overwhelming but potentially threatening to the safety of everyone in the environment. Health professionals' exposure to traumatic incidents and crises was generally accepted as being part of the job, but participants emphasized the importance of patient-centeredness, effective interpersonal communication skills (Hahn et al., 2012), and the development of rapport to avoid aggression, and this resonates with findings reported elsewhere (Lau, Magarey, & Wiechula, 2012).

The role of the ED setting is to provide acute accident and emergency services and such will always have inherent risks, as people present with behavioural health emergencies, and other complex health problems (Taylor & Rew, 2011). Participants identified cues to recognising potentially aggressive situations and these included, but were not limited to: escalating threatening behaviour and aggressive outbursts including intimidating actions such as screaming, spitting on staff and the destruction of furniture and furnishings, demonstrating excessive strength and the capacity for significant harm to themselves, staff and others. These situations potentially compromised safety and security for all in the ED. Similar concerns are identified

elsewhere in the literature, and the effects of aggression in the ED are noted to be far-reaching and costly (Taylor & Rew, 2011).

Whilst violence against ED staff is highly prevalent and well documented, previous research identifies that an important factor for mitigating workplace violence in the ED is a commitment by administrators, ED managers, and hospital security (Gacki-Smith et al., 2009). Despite this, recent research indicates that violence is endemic to the ED and that there is a culture of acceptance of violence (Wolf et al., 2014). The impact violence has on health services and the health workforce needs to be better understood as does the need to ensure and provide real time support and resources to staff subjected to aggression and violence so that they feel safe, valued, and respected (Papa & Venella, 2013). In one Australian hospital, it was reported that sedations were required for a 1/3 of amphetamine-affected people presenting to emergency (Gray et al., 2007). To sedate a patient in these circumstances may involve paramedics, nursing, medical and security personnel – a highly resource intensive intervention. These situations mean staff are required to be redirected from providing care to other patients and result in service delay and potential harm to other patients through missed care. Importantly, in situations where there are insufficient security staff available, the safety of staff and other patients within the ED is at risk (Gray et al., 2007).

Participants identified some variations between EDs, supporting research suggesting that policies and procedures were not always consistent across services (Tompkins-Dobbs & Schiefelbein, 2011). An example of this is the role of security officers. The role of security in some EDs was highlighted as problematic, with some security staff taking only an observational role and refusing to assist even when there was a high risk situation unfolding. Research describing ED workers' views of security officers' effectiveness during actual events of verbal and /or physical

violence stressed the importance of early communication between security officers and ED workers; ideally before events occur, and highlighted the need to understand and clarify the respective roles and responsibilities of both security officers and ED workers (Gillespie, Gates, Miller, & Howard, 2012). For paramedics working with different EDs the differing roles and responsibilities amongst ED security staff was identified as an area which could benefit from further attention. Future research with hospital-based security staff has been suggested, to better understand their perceptions about their role in relation to workplace violence (Gillespie et al., 2012).

Noteworthy was the compassion and professionalism evident in the participant responses even when being exposed to intense and challenging situations. Despite the circumstances participants still prioritised the dignity and personhood of these challenging patients, and presented as positive, empathic and confident. The literature suggests that training in mental health and crisis intervention strategies are needed to enable staff to effectively deal with such challenging situations and to build emotional resiliency (Chan, Chan, & Kee, 2013). *The National ICE Taskforce Report* also recommended a national training program for nurses, paramedics and physicians focusing on improved drug screening and interventions as an important step in enabling these staff to provide tailored care to people affected by ICE (Commonwealth of Australia, 2015).

The cycle of aggression and violence associated with ICE use in healthcare facilities will continue to escalate as long as the drug is readily available. Although law enforcement agencies actively try to interrupt supply, the reality is that it is an accessible and relatively inexpensive substance (Commonwealth of Australia, 2015). For new users, ICE offers the thrill of unprecedented self-confidence, euphoria and heightened sexual pleasure for as little as \$50 in

some places in Australia, which represents a cheaper alternative to drinking (Commonwealth of Australia, 2015). On the other hand, ICE use carries with it the propensity for dependence and relapse, it has a lengthy withdrawal and recovery time, and resultant cognitive impairment that may continue for months after use (Commonwealth of Australia, 2015).

Strengths and limitations

This study has several strengths, which include the multidisciplinary backgrounds of participants, and the multiple services participants were drawn from. Data quality was also high as interviews were in-depth, and thoughtful insights were provided by skilled clinicians from both metropolitan and rural settings. However, no consumer accounts were sought or mental health or behavioural histories obtained or site specific policies reviewed.

CONCLUSION

Given current trends in the use of ICE, presentations to the ED of people affected by ICE are likely to continue to grow. With this in mind, staff need to be aware of the nature of ICE use and the adverse impact of this on the mental and physical health of users. What is clear, is that establishing and maintaining safety in the emergency care setting is of utmost importance, and should be a priority for healthcare managers.

RELEVANCE FOR CLINICAL PRACTICE

Emergency staff are at increased risk of verbal and physical violence in their busy work settings. Understanding aggression and violence is complicated by a number of factors (Sexton, Carlson, Leukefeld, & Booth, 2009) and the need for consistent and effective care for persons affected by

methamphetamine (Tompkins-Dobbs & Schiefelbein, 2011) was identified by participants. The under-reporting of violence and aggression in the ED is well noted (Luck et al., 2008), and further research should explore barriers and attitudes that prevent or enhance reporting (Taylor & Rew, 2011).

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