



## Police use of TASER devices in mental health emergencies: A review<sup>☆</sup>

Anthony J. O'Brien<sup>a,\*</sup>, Katey Thom<sup>b,1</sup>

<sup>a</sup> Centre for Mental Health Research, University of Auckland, Private Bag 92019, Auckland, New Zealand

<sup>b</sup> Centre for Mental Health Research, Faculty of Medical and Health Sciences, University of Auckland, Private Bag 92019, Auckland 1142, New Zealand



### ARTICLE INFO

Available online 20 March 2014

#### Keywords:

Police  
TASER devices  
Mental health  
Crisis  
Research

### ABSTRACT

The proliferation of TASER devices among police forces internationally has been accompanied by concerns about injuries and health effects, and about the use of TASER devices on vulnerable populations such as people with mental illness. TASER devices have generated a flood of research studies, although there remain unanswered questions about some of the key issues. This paper outlines the introduction of TASER devices to policing and their subsequent widespread adoption. The paper considers the role of police in mental health emergencies with a particular focus on use of TASER devices. Some factors contribute to the special vulnerability of people with mental illness to the effects of TASER devices. The paper also reviews research into use of TASER devices and raises issues about conflict of interest in research into TASER devices. We conclude that TASER devices look set to play a significant role in policing in the future. We make suggestions for a future research programme, and suggest guidelines for publication of papers in which there may be a conflict of interest.

© 2014 Elsevier Ltd. All rights reserved.

### 1. Introduction

Police exercise a unique role in the community in responding to a range of emergency situations, including behavioural emergencies. Many behavioural emergencies involve people with either newly presenting mental illness or a history of mental illness, and are frequently complicated by alcohol or other substances. Over the past two decades many police departments internationally have deployed TASER devices as part of their range of options in responding to emergencies. The available literature suggests that people with mental illness are prominent among the groups on whom TASER devices are deployed. Use of TASER devices is a concern to mental health professionals for two reasons. Firstly, police perceptions of people with mental illness as dangerous may contribute to an increased likelihood of use of TASER devices in mental health emergencies compared to criminal arrests. Secondly, the known health risks of TASER devices are heightened in the case of people in mental health crisis who may show central nervous system arousal as a result of high levels of anxiety. People with mental illness also have a high incidence of comorbid physical illness and use of illicit substances, and may be prescribed psychotropic medications that further heighten their risk.

In this paper we review the nature of police involvement in mental health emergencies in community settings, with a particular focus on police use of TASER devices. In addition to addressing the concerns noted above, we also discuss the state of current literature on police

use of TASER devices in mental health emergencies, and make suggestions for a research agenda in this area. The current literature on use of TASER devices pays scant attention to their use on people with mental illness. Questionable claims are made about prevention of suicide, many studies do not present data on people with mental illness, and overall there is a lack of robust research on the incidence of use of TASER devices on people with mental illness. The research literature on TASER devices safety is plagued by selection bias and lack of generalizability to real world circumstances. Concerns about conflict of interest have been reported, most frequently in relation to researchers with financial ties to the manufacturer, TASER International Inc. There is a need for more independent research and more research into the implications of TASER devices use on people with mental illness.

### 2. TASER devices

TASER devices<sup>2</sup>, alternatively referred to as conducted electrical weapons (CEWs) or conducted electrical devices (CEDs) are hand-held devices designed to deliver short high-voltage, low current energy pulses by means of twin barbs attached to fine wires with the aim of temporarily paralyzing a person by causing painful muscular contraction (Kunz, Grove, & Fischer, 2012). First introduced to police in 1974 (Koscove, 1985), use of TASER devices in engagements with individuals with behavioural disturbances has increased markedly in the past two decades (Crow & Adrion, 2011). Information from the manufacturer of

<sup>☆</sup> TASER is the registered trademark of TASER International, Inc.

\* Corresponding author. Tel.: +64 9 3737599x85693.

E-mail address: a.obrien@auckland.ac.nz (A.J. O'Brien).

<sup>1</sup> Tel.: +64 9 9239579.

<sup>2</sup> In this paper we use the proprietary term "TASER" to refer to all currently used electrical behaviour control devices as that is the term most commonly used in the literature. Where researchers have used other terms we follow the terminology used by those researchers.

TASER devices states that the devices are used by more than 16,000 agencies in 40 countries (<http://investor.taser.com/>).

Two major reasons have been offered in the literature for the introduction of TASER devices into policing. Most prominently, TASER devices are considered to offer a “less lethal” police response when compared to firearms because they allow police to effectively contain situations of high risk without resort to lethal force (Vilke & Chan, 2007; White & Ready, 2007). TASER devices also offer the potential that they allow police to effectively contain situations of high risk while reducing the rate of officer injuries.

A before and after study across 12 police departments found a 25% reduction in officer injuries following the introduction of TASER devices (McDonald, Kaminski, & Smith, 2009). The main reason for injury reduction is the reduced need to physically intervene with a resistant person. Further evidence of injury reductions comes from a four year quasi-experimental study which compared officer and suspect injury in police departments with and without TASER devices (Taylor & Woods, 2010). The researchers reported that compared to departments that deployed TASER devices, those without the devices had higher rates of officer and suspect injuries, and higher rates of injuries requiring medical attention. A potentially confounding factor in Taylor and Woods' study was the quite large unexplained increases in all four injury measures in the non-TASER device sites in the post period compared to the preperiod. Benefits of injury reductions are not realised in all situations and under some circumstances, notably those involving multiple forms of police response, use of TASER devices has been associated with a higher rate of officer injuries (Paoline, Terrill, & Ingram, 2011; Terrill & Paoline, 2012). A limitation of the latter studies is that data included dart injuries, which had the effect of inflating the number of injuries recorded (Kaminski, Engel, Rojek, Smith, & Alpert, 2013).

While police use of TASER devices seems to enjoy a high level of public acceptance, this development is not without controversy. With the increased use of TASER devices has come growing concern and public debate about safety of those subject to this technology. In the United States, Amnesty International (2008) has documented 334 deaths following use of TASER devices between 2001 and 2008. The much publicised death of Robert Dziekanski at Vancouver airport (Rolfsen, 2007) has also contributed to public concerns about safety of TASER devices. These concerns are reinforced by news reports of individual deaths following use of TASER devices in Australia (Merhab, 2008) the United States (Hall, 2009) and England (Smith, 2013).

The Amnesty International report and the media attention to the case of Robert Dziekanski and others represent the public face of the debate about the safety of TASER devices, but medical literature also reports a number of adverse effects (Denham & Mallon, 1999; Lim & Seet, 2007; Sanford, Jacobs, Roe, & Terndrup, 2011; Strote & Hutson, 2006). Although TASER devices are reported to be safe in healthy individuals (Bleetman, Steyn, & Lee, 2004), other researchers have concluded that “While less lethal weapons are significantly safer than traditional firearms, no weapon can be entirely non-lethal and no weapon can be made entirely safe.” (Bozeman & Winslow, 2005). The medical literature on TASER devices contains many case reports of injuries from TASER devices and these are discussed later in this paper (for a review, see Pasquier, Carron, Valotton, & Yersin, 2011).

Safety concerns are acknowledged by the manufacturer of TASER devices, whose product information sheet states that use of TASER devices “causes physiologic and/or metabolic effects that may increase the risk of death or serious injury” (Taser International, 2013). The information sheet goes on to note that some individuals, particularly those with “profound agitation”, drug intoxication or chronic drug abuse, may be particularly vulnerable. The warning includes “excited delirium”, a diagnostic category not found in either of the commonly used diagnostic taxonomies, the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM IVTR) or the World Health Organization's *International Classification of Diseases* (ICD-9) (Takeuchi, Ahern, & Henderson, 2011), but which is used to

describe a syndrome in which people experience severe agitation with lethal consequences (Vilke, Bozeman, Dawes, Demers, & Wilson, 2012). Excited delirium is commonly cited as contributing to deaths when individuals have been subject to TASER device discharge (Jauchem, 2010; Strote & Hutson, 2006).

Use of TASER devices in mental health emergencies has also been subject of debate, with rights groups such as Amnesty International criticising use of TASER devices on people with mental illness. Rates of use of TASER devices in mental health emergencies appear to be high (Ho, Dawes, Johnson, Lundin, & Miner, 2007; O'Brien, McKenna, Thom, Diesfeld, & Simpson, 2011) and use of TASER devices has extended from community to hospital settings (Erwin & Philibert, 2006; Little, Hogbin, & Burt, 2013; O'Brien et al., 2011), including on psychiatric patients in emergency departments (Choudhary, Sabri, & Sabri, 2012). It is clear that the TASER device has appeal to staff in a range of emergency and health settings, and with the potential for proliferation into some unanticipated contexts, especially mental health settings.

### 3. Police and mental health emergencies

Police involvement in mental health emergencies is not a new phenomenon (for an early review, see Bittner, 1967). In every western country police have traditionally held a role of intervention with people with mental illness in community settings. However concerns about police interaction with individuals with mental illness, often expressed by police themselves, rose markedly during the period of deinstitutionalisation, when large numbers of formerly hospitalised patients were discharged to community living (Lamb, Weinberger, & De Cuir, 2002). At the same time, as hospitals began to downsize, police disposition to hospital became more difficult. Services to people with mental illness were not always available at the point of arrest, leading police to refer to themselves as “street corner psychiatrists” (Teplin & Pruett, 1992). In many western countries mental health services are now predominantly community focussed. Police interaction with people with mental illness is relatively common, and is the focus of a considerable proportion of police time (Godfredson, Thomas, Ogloff, & Luebbers, 2010; Short, MacDonald, Luebbers, Ogloff, & Thomas, 2012; van den Brink et al., 2012; Wells & Schafer, 2006), with use of alcohol and other substances further complicating these encounters.

Frequently, when mental health crises arise in community settings, neither police nor mental health services alone can respond effectively. Mental health teams are not empowered or trained to effect detention and police, while they may recognise features of mental illness, are often not trained in psychiatric assessment. There is a need for police and mental health services to work together in such situations (Laing, Halsey, Donohue, Newman, & Cashin, 2009; Patch & Arrigo, 1999). A large number of jurisdictions have initiated combined police and mental health teams, with a view to identify mental health issues at the point of arrest and diverting detainees from the criminal justice system towards mental health services. While the most well-known and well researched example of such an innovation is the Crisis Intervention Team (CIT) or Memphis Model (Borum, 1998; Compton, Badora, Watson, & Oliva, 2008; Ogloff et al., 2012; Watson & Fulambarker, 2012; Watson, Morabito, Draine, & Ottati, 2008), a range of different models have been developed in different contexts (see Cotton and Coleman (2010); Herrington and Pope (2013); Steadman, Deane, Borum, and Morrissey (2000)). Evaluations of collaborations between police and mental health have generally been positive, with benefits noted in officer attitudes and knowledge, timeliness of mental health service response, and diversion to mental health services. However police contacts with people with mental illness still contain the potential for aggression and violence, and for the need for force in the police response (Johnson, 2011).

Recently, police have explored the use of a range of strategic options aimed at reducing reliance on firearms in situations where a person

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات