STOP THE COWARD PUNCH CAMPAIGN

RESEARCH PROGRAM 2023: Part 1

Survivor health outcomes of

Coward Punch Assaults in Australia

October 2023

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Ethics

This project was approved by the Victorian Institute of Forensic Medicine Research and Ethics Committees (RAC28/2019 and EC23/2019).

Research Team

This research was coordinated by the Victorian Institute of Forensic Medicine and the Department of Forensic Medicine, Monash University, by Associate Professor Jennifer Schumann, Dr Reena Sarkar, Ms Tam-Quyen Nguyen, and Professor Richard Bassed.

EXECUTIVE SUMMARY

Coward punch assaults (CPA) are violent and often unprovoked assaults involving a single, powerful punch to the head, usually without warning. These attacks can result in serious injuries or death that have enduring impacts on the lives of victims, offenders, their families and friends, and the wider community. Targeted education and awareness campaigns around Australia along with minimum mandatory sentences for convicted offenders in some jurisdictions have aimed to reduce and deter future offending. However, these senseless acts of violence continue to occur.

Our previous research examined the perpetrators and fatalities of CPAs since 2000. What remained unclear was how many survivors there are of CPA and the extent of their injuries in the short and long term. This research therefore aimed to examine the survivors of CPA in Australia, to further inform awareness campaigns and prevention strategies.

This report outlines a program of work examining 471 judicial sentencing reviews of fatal and nonfatal convictions for CPA in Australia between 1990 and 2020, of which there were 346 individual survivors.

Most survivors were males in their early thirties, many of whom were left with lifelong mental and physical disabilities. Over a quarter (27%) suffered permanent brain injury, with significant impacts on quality of life reported in nearly three-quarters (72.2%) of victims. This translates to decades spent enduring the life-altering outcomes of what is often a split-second decision by the offender. Over 72% were hospitalised, with surgical intervention required in nearly 42% of survivors, some cases involving extensive facial and skull reconstructions.

Permanent physical injuries such as motor function impairment, chronic pain, and severe scarring, were reported in nearly half of survivors (44%). Significant cognitive losses were just as common (43.6%). Permanent psychological and behavioural impairment included chronic depression and anxiety, post-traumatic stress disorder, and social withdrawal, demonstrating the often-unseen lifelong impacts for CPA survivors. Economic loss (43.6%) and temporary or permanent unemployment (67%) also contributed to a substantial loss in quality of life, which often has enduring effects not just on the victim, but their family as well.

This work highlights the importance of research in providing a current evidence base to inform policy and practice. Our previous research found over 170 deaths attributed to CPA in Australia; we now know that there have been more than **double** the number of survivors. There is more to be done to prevent the scourge on our community caused by CPA.

INTRODUCTION

This study documents and describes the health outcomes of survivors of coward punch assaults (CPA) in Australia. The data was derived from a perpetrator-based dataset developed as part of our research on the impacts of CPA on victims and perpetrators in Australia.

Judicial sentencing reviews (JSR) were extracted from a national legal database, *Lexis Advance*, using predefined eligibility criteria to identify perpetrators of CPA in Australia between 1 January 1990 and 31 December 2020. These criteria for inclusion in the database focused on both the mechanism of injury delivery and the consequential injuries from the assault; namely, blunt force application by bodily force to the head, face and neck region, with subsequent loss of consciousness and/or secondary impact on a hard surface such as the ground.

During the period 1990-2020, a total of 471 JSRs were reviewed, comprising 177 cases with fatal outcomes and 294 cases with non-fatal outcomes. Noting that some cases involved multiple CPA victims, these cases provided a total dataset of 346 CPA survivors. Compared with fatal outcomes, survivors comprised a majority of CPA victims (62%) overall.

The severity of injuries in survivors was classified as *serious* or *non-serious* per the World Health Organization's (WHO) framework for computing the cost of injury in interpersonal violence[1]. A *serious* injury was one that required hospital admission as an inpatient, whereas a *non-serious* injury was one that did not require hospital admission. *Non-serious* injuries may have required access to primary care such as emergency department services.

[1] Butchart et al. Manual for estimating the economic costs of injuries due to interpersonal and self-directed violence. World Health Organisation and the Centers for disease control and prevention. 2008. URL: https://www.who.int/publications/i/item/9789241596367

RESULTS

The results were reported for the overall number of CPA survivors in Australia, demographic characteristics, severity of injuries, immediate and long-term treatment needs, and the impact of permanent injuries and debilitation.

Survivor characteristics in Australia

The number of CPA survivors in Australia identified during the period 1990-2020 was 346 individuals. Based on the quality and availability of information, 241 cases of 346 were subjected to full analysis. Approximately 40% of cases were assaulted by way of a single punch resulting in a secondary impact with a hard surface (Type 1 mechanism), while 60% involved a single punch followed by additional kicking, stomping or punching (Type 2 mechanism). Eighty-two per cent of cases occurred at public venues as opposed to 18% at private locations. About 72% of survivors were unknown to their perpetrator.

Most survivors were male (88.8%), in their early thirties, with a median age of 31 years (range 13-68 years). Most (30.3%) were from New South Wales, followed by an equal number of cases in Queensland and Western Australia (both: 15.6%).

The majority of survivors were left with serious injuries. Of 241 cases, 174 (72.2%) required hospitalisation. The remaining 67 cases (27.8%) were non-serious, i.e., did not require hospitalisation. The highest severity outcome cases were most frequent in New South Wales (31.6%) followed by Queensland (16.1%) and Victoria (14.4%). Immediate neurological changes (e.g., altered consciousness, loss of recall ability, dizziness, vomiting) were reported in 53.5% of cases with a small number of survivors experiencing a delayed onset of symptoms (9.1%).

Short-term emergency/intensive care treatment

Ambulance attendance was reported in 36% overall in all cases, including 5 cases which required air ambulance services. In <5 cases, first aid assistance was rendered by bystanders or by friends. More than a third in the seriously injured outcome group (36%) were delayed hospital admissions. Diagnostic scans were performed in 39% of serious cases and 9% of non-serious cases, according to available data, with most requiring CT scans (n=26), radiographs (n=14), or MRI (n=7), and other unspecified scans in a further 50 cases.

Over 72% of cases required hospital admission. Of those admitted, about 36 (21%) cases required intensive care treatment on presentation to hospital.

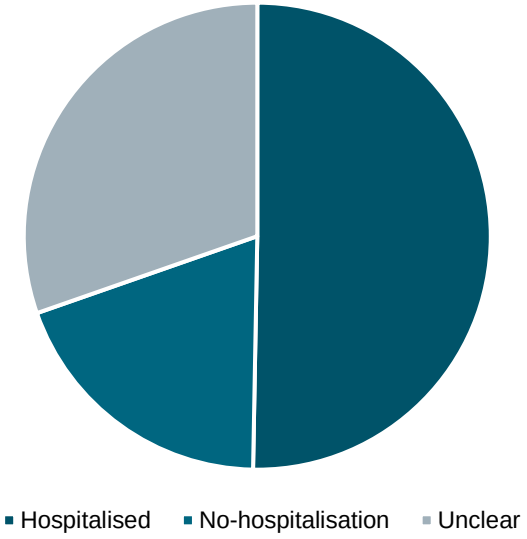

Figure 1. Proportion of survivors with hospital outcomes between 1990-2020.

Surgical intervention (neurological or fracture correction) was performed in 41.9% of survivors. Fracture correction was more complex in some cases, requiring direct insertion of stabilisation plates in the skull or facial bones. Extensive skull vault or facial reconstruction was required in seriously injured patients.

The mean Intensive Care Unit (ICU) length of stay was 7 days (SD: 8.1). Mean hospital length of stay excluding ICU stay was 16 days (SD: 25.6). The mean length of stay in hospital was 17 days (SD: 24.9).

Reported Glasgow Coma Scale ranged from 3 to 10 at the time of the incident to up to 3 weeks post-incident. The Glasgow Coma Scale (GCS) is used to objectively describe the extent of impaired consciousness in all types of acute medical and trauma patients[2]. The scale assesses patients according to three aspects of responsiveness: eye-opening, motor, and verbal responses, with the highest score of 15 indicating a person is awake and responsive, and the lowest score of 3 indicating a deeply comatose patient typically requiring mechanical

[2] Jain S, Iverson LM. Glasgow Coma Scale. [Updated 2023 Jun 12]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK513298/

ventilation. Patients with head injury and low GCS scores on hospital admission have a poor prognosis, with a GCS score of 3 associated with an extremely high mortality rate.

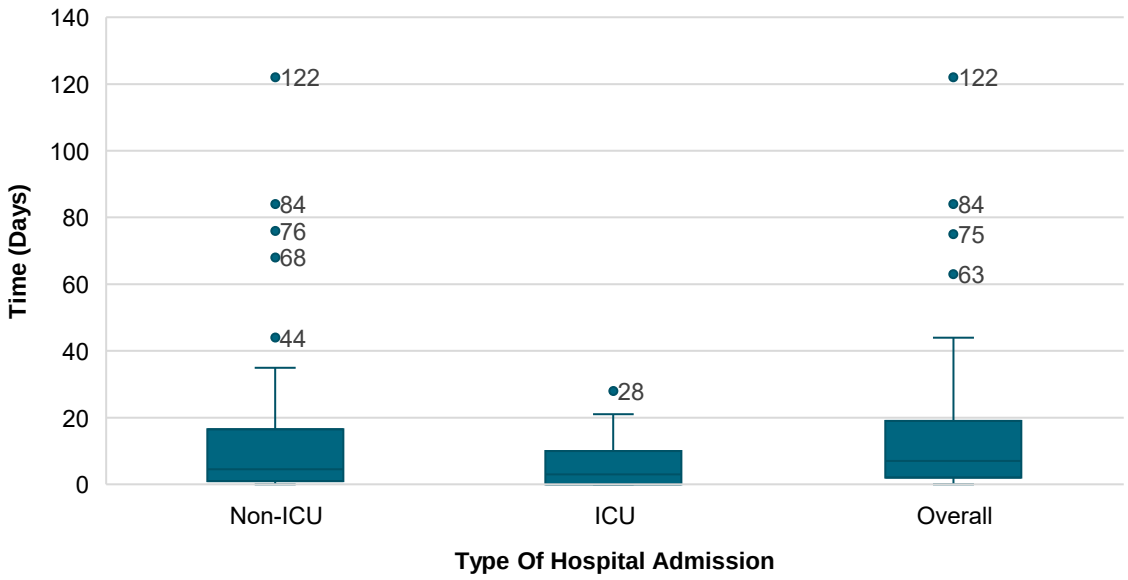

Figure 2. Length of stay in days for different types of hospital admission for survivors of Coward Punch Assaults. Non-Intensive Care Unit (Non-ICU) stays had a median of 4.5 days, Intensive Care Unit (ICU) stays had a median of 3 days. Overall, survivors stayed a median length of 7 days.

Permanent injuries

Permanent injuries were described as physical, cognitive, psychological, behavioural, and/or economic. Of the 241 analysed cases, there was a significantly higher frequency of cognitive loss, physical impairment, psychological impact, and economic loss among the *serious* injury group when compared to the *non-serious* group ($p<0.001$). There was no significant difference between the groups with relation to behavioural impairment, indicating a similar proportion of victims between injury severity types experienced this outcome.

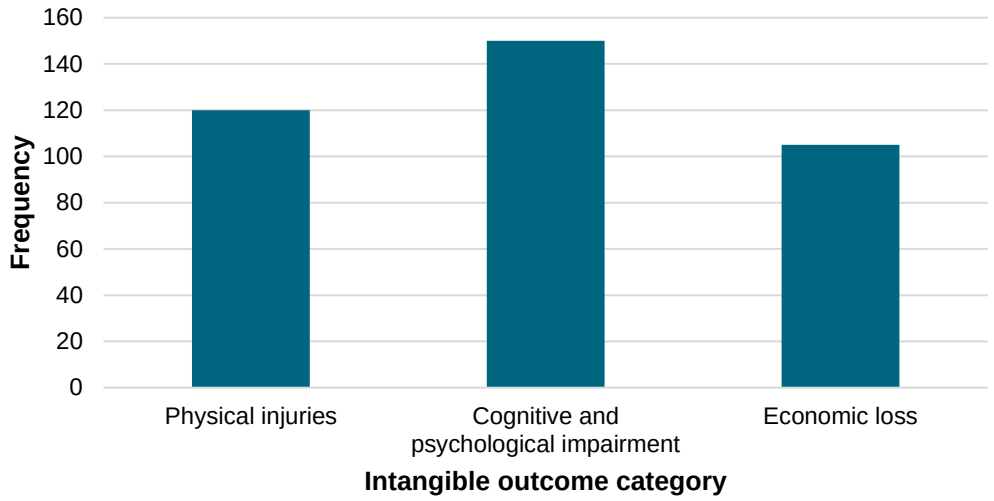

Figure 3. Proportion of survivors suffering permanent effects to their physical health or cognitive and psychological health.

Physical injuries

Permanent physical injuries were reported in nearly half (44.0%) of survivors. This included motor function impairments, chronic pain, scarring, and incontinence.

Over a quarter (n=67, 27.8%) of cases reported sensory loss, 47 (19.5%) reported chronic pain, and 19 (11%) reported chronic scarring and disfigurement, as long-term permanent injury outcomes of the CPA.

Forty-seven survivors (27%) suffered permanent brain injury, with 22% and 12% of cases experiencing motor and speech impairment, respectively. A tenth of cases endured a medically induced coma to counter the consequences of brain swelling.

Cognitive and psychological impairment

Permanent cognitive losses were reported in over half (43.6%) of survivors. This included cognitive function impairment, speech impairment, and reduced consciousness. Of these, over a quarter (n=66, 27.4%) reported more severe forms of cognitive impairment. Over a tenth (11%) had post-traumatic amnesia.

Psychological impacts were reported in over a third (35.7%) of survivors, including chronic anxiety, depression, post-traumatic stress disorder, sleep disorder, and a generalised fear for safety.

Behavioural impairment was reported in over a fifth of cases (22%) and included social withdrawal and withdrawal from recreational activities.

Quality of Life

Quality of life was significantly impacted by a CPA in 72.2% of survivors, overall.

This included loss of the ability to drive (19, 7.9%), sleep disturbances (19, 7.9%) and repeated seizures (11, 4.6%). Psychosocial sequelae included relationship breakdown (45, 18.7%), anxiety (29, 12.0%), depression (21; 8.7%), ability to socialize (n=19, 7.9%) or participate in sports (25, 10.4%), fear for personal safety (15, 6.2%), or post-traumatic stress (15, 6.2%).

Economic loss was experienced by nearly half (43.6%) of survivors, including costs borne from loss of employment, and medical cost of hospitalisation. Of these, ongoing financial hardship was experienced by 15 (6.2%) survivors.

Of the JSRs reporting pre- and/or post-assault employment status (n=79), **67% of survivors reported temporary or permanent discontinuity in employment**. Based on available information, temporary absence from work was reported in 19.5% of survivors, with permanent impairment in overall productivity in work in a tenth of cases (10.4%). *Seriously injured* survivors typically required inpatient or outpatient rehabilitation or had to rely on family members for basic necessities such as accommodation, meals, and clothing. It was interesting to note the reported impact on family members of survivors, with some reported as suffering a continued fear of public spaces.

Other health outcomes

All medical comorbidities developing post-assault were life-altering. The severe effects included loss of bowel functions, repeated stroke, recurrent seizures, impaired balance, shoulder damage, and hemiparalysis. Other physical effects were permanent damage to the eye, nose, ear or associated structures, inability to close the mouth completely, degeneration or impairment of upper or lower limbs, predisposition to infections, incontinence, and ongoing dental issues (bite impaired, loose teeth). The nature of outpatient rehabilitative care included psychological consultation, dental rehabilitation and reconstruction, speech pathology training and or occupational therapy. Ongoing use of prescription medications was required in at least 37 (15.4%) of cases.

LIMITATIONS AND CONSIDERATIONS

Due to the nature of court documents, data was not consistently available in all cases to document all characteristics described in this report. The inclusion of specific information within JSRs is up to the discretion of the presiding judge and the circumstances of the individual case. It is therefore likely that these data are an underrepresentation of the true incidence of these characteristics of CPA survivors. However, they provide a novel insight into CPA over three decades in Australia, quantifying the impacts of long-term health outcomes among CPA survivors for the first time in the world.

[i] One case from 2012 was included in both datasets.