

A Health Response to Non-lethal Strangulation in Domestic and Family Violence

Literature Review

June 2017

Non-lethal Strangulation in Domestic and Family Violence

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1. Introduction

There appears to be broad, international consensus that the occurrence of non-lethal strangulation in domestic and family violence (DFV) situations is a serious act of violence, that it can cause serious psychological and physical harm without any obvious signs on the body,¹ that it is an indication of increasing severity of DFV,² and that it is a significant risk factor for future homicide.³

Strangulation is defined as the act of obstructing the airflow and/or the blood vessels in the neck region, leading to a lack of oxygen supply to the brain and body.⁴ Non-lethal strangulation is common amongst women who have experienced DFV although victims often use other terminology such as choking, suffocating, or throttling.⁵

Within the context of DFV, non-lethal strangulation is different to other forms of physical assault, in a number of important ways. Firstly, there may be few visible symptoms of the injury caused.⁶ Secondly, there are few other acts of violence that have potential to create so many health problems for victims.⁷ Finally, it is a tool used to demonstrate the perpetrator's ultimate power to take the life of the victim^{8,9}, an experience likely to cause severe psychological distress.¹⁰

While victim advocates and DFV support workers have long been aware of the incidence and seriousness of non-lethal strangulation,¹¹ the research and policy fields have been relatively slow to respond. The most common public policy response to the developing body of evidence on non-lethal strangulation has been legislative reform that encodes strangulation as a stand-alone criminal offence. Although the intent of a stand-alone strangulation offence is primarily about improved justice responses, the literature cites other intentions such as raising awareness,¹² improving identification and treatment of health needs, and better coordination of forensic responses.^{13,14}

2. Queensland Context

2.1 *Not Now, Not Ever* reforms

In 2015 the Special Taskforce on Domestic and Family Violence in Queensland (the taskforce) handed down its final report, the *Not Now, Not Ever* report, making 140 recommendations that provide the framework for wide-ranging legal, social and cultural reforms.¹⁵ All 121 of the recommendations to government were accepted by the Palaszczuk government.

Evidence considered by the taskforce noted that non-lethal strangulation within the context of DFV is a clear predictive indicator of an escalation in violent offending, and a significant risk factor for homicide. Subsequently *Not Now, Not Ever* recommendation 120 states "... that the Queensland Government considers the creation of a specific offence of strangulation".^{16(p305)} In December 2015 the Hon Yvette D'Ath MP, Attorney-General and Minister for Justice and Minister for Training and Skills, introduced the Criminal Law (Domestic Violence) Amendment Bill (No.2) 2015 (Bill) to the House. Following their examination of the legislation, the parliamentary Legal Affairs and Community Safety Committee recommended that the bill be passed.¹⁷ Strangulation became a stand-alone criminal offence in Queensland in April 2016. In the 12 months

since almost 800 people have been charged with the crime.¹⁸ Data on conviction numbers is not yet available.

2.2 Advocacy Efforts

The Red Rose Foundation (the foundation) is an advocacy body that seeks to address factors surrounding DFV deaths in Queensland. In 2017, the foundation brought experts from the Training Institute for Strangulation Prevention in San Diego to Queensland to provide three days of training in Brisbane. This was followed by a key note presentation at the Not Now, Note Ever Research Symposium organised by the Queensland Centre for Domestic and Family Violence Research in Mackay.

The Training Institute on Strangulation Prevention (the institute) was established in 2011 in response to an increasing demand for training. The goals of the institute are to:

*Enhance the knowledge and understanding of professionals working with victims of domestic violence and sexual assault who are strangled; Improve policy and practice among the legal, medical, and advocacy communities; Maximize capacity and expertise; Increase offender accountability; and ultimately enhance victim safety.*¹⁹

The institute was established after its founders, San Diego District Attorney Gael Strack and emergency physician Dr George McClane, identified strangulation as a unique and serious form of interpersonal violence, and published a landmark research article on the topic in the early 2000s.²⁰ This early research was the catalyst for much of the research and attention given to the subject in the last 15 years²¹ and subsequently the institute is seen as a leading world authority on non-lethal strangulation in the context of DFV.

With the enactment of strangulation laws in many jurisdictions, the advocacy efforts of the institute have shifted to awareness raising and training for first responders and medical personnel to recognise symptoms and risk, and to gather the forensic evidence required to get convictions.²²

2.3 Current Queensland Health response

The Department of Health, in collaboration with Queensland Ambulance Service (QAS), representatives from Hospitals and Health Services (HHSs), and other government and non-government key stakeholders, recently developed a toolkit of resources to support health professionals to recognise and respond to people experiencing DFV. The toolkit includes two online training modules, face-to-face training, and a number of hardcopy resources including *Understanding Domestic and Family Violence*, and *Clinical Response to Domestic and Family Violence*. Non-fatal strangulation is identified as a risk factor within these resources.

The toolkit of resources has been supported by a train-the-trainer program that has been delivered state wide at 29 sites across both the public and private health sectors, so that health clinicians in HHSs can provide training to their local colleagues in the health workforce.

All newly employed health service employees and health professionals who work in a range of clinical areas (including maternity, emergency department, community child

health, paediatrics, allied health, mental health, alcohol and other drug services, Aboriginal and Torres Strait Islander health and multicultural health services) are recommended to complete the DFV blended learning package.

3. The evidence

A full analysis, including review of findings and research limitations, of all available literature across the criminology, forensic science, and medical research disciplines is outside the scope of this report. Much of the evidence provided is taken from summaries in the peer-reviewed literature.

A consistent limitation in the research methodology of studies on this topic is small sample size. Other reviews of available literature also note that not all patient populations are represented in the research, with the incidence and outcomes of strangulation on children, the elderly, indigenous and pregnant victims not addressed.²³ In a recent systematic review of the scholarly research in the area of non-lethal strangulation it was noted that

... (it) is a neglected area of research leaving much to be desired in terms of proper definitions, methodological rigour, and systematic efforts to situate nonfatal strangulation theoretically and with respect to measuring outcomes and long-term effects.^{24(p2)}

As mentioned a primary shortcoming within the body of literature on strangulation in DFV is that there has been no definitional consistency making analysis and comparison of data sets difficult. Terms like ‘choking’ and ‘throttling’ have been used interchangeably with strangulation by researchers, perhaps reflecting the vernacular of law enforcement, health workers and victims. The authors of this review do not make any suggestion that the incidence and risk of non-lethal strangulation in DFV has been overstated in the literature, but they do highlight the need for evidence based understandings and approaches.²⁵

There is very little published literature in Australia that addresses the issue of non-lethal strangulation.

3.1 Strangulation

Strangulation is defined as the obstruction of blood vessels and/or airflow in the neck, resulting in asphyxia.²⁶

The structure of the neck region makes humans uniquely vulnerable to life threatening injuries owing to the proximity of the airways, major blood vessels, and the spinal cord. Closure of the vascular and/or respiratory structures in the neck deprives the brain of oxygen, can cause unconsciousness in seconds, and anoxic injury and death within minutes.²⁷ Where death does not occur, a range of health problems can present.

3.2 Incidence of non-lethal strangulation in DFV

Although the true prevalence of non-lethal strangulation in DFV is not immediately clear from the evidence to date, even the most conservative estimate suggests that many

women in the community will have experienced strangulation by a partner, ex-partner or family member at some time in their lives.

In 2010, a US national survey found that 9.7% of all women reported experiencing at least one incident of choking by an intimate partner in their lifetime.²⁸ This figure increases between three-fold in research cohorts of women reporting domestic and family violence, and seven-fold, with one study revealing that 68% of the women in domestic violence shelters reporting experiences of strangulation.^{29 30 31}

In the only published study of its kind in Australia to date, researchers examined court files in relation to cross-applications for Domestic Violence Orders in two Queensland Magistrates Courts – Brisbane and Beenleigh - over a period of two years, examining a total of 656 cross-application files.³² 12% of women in the sample made unsolicited allegations of strangulation and 90% of the strangulation allegations were made by women.³³

In the 12 months following the introduction of stand-alone strangulation laws in Queensland in April 2016, almost 800 people had been charged with the offence, suggesting that prevalence rates are high.³⁴

3.2 Non-lethal strangulation as a risk factor in DFV

The evidence from across the developed world indicates that non-lethal strangulation in DFV is an indicator of an escalation in the severity of domestic and family violence. In Queensland researchers found that 87% of cases of non-lethal strangulation were accompanied by allegations of other serious violence including sexual assault, and verbal threats of murder.³⁵ In a recent study in Kentucky in the United States, of 102 surviving victims of strangulation 97% of victims also sustained blunt force injuries in addition to injuries resulting from strangulation.³⁶

The evidence currently available also indicates that non-lethal strangulation is a risk factor for domestic femicide resulting from any form of violence. In a direct comparison of documented cases of domestic homicide or attempted domestic homicide against a control group of abused-only victims, Glass et al³⁷ found that a prior experience of non-fatal strangulation increased six-fold the chances of becoming a victim of attempted domestic homicide, and seven-fold the chances of becoming a victim of domestic homicide.

3.3 Health consequences of non-lethal strangulation

Until the late 1990's, medical literature on strangulation focused almost entirely on injuries identified at post-mortem examination, such as fractures of the hyoid bone, and injuries to the larynx and associated cartilage and mucosa, that would not typically be externally visible.³⁸ In their landmark review of 300 cases of intimate partner strangulation in San Diego, Strack et al³⁹ found that non-lethal strangulation has a complex range of previously unidentified sequelae, catalysing further attention and research in the years since.

The current body of evidence suggests the following:

- Injuries caused by strangulation are often not visible thus contributing to the minimisation of physical injury by victims, police and medical responders alike.⁴⁰ In the San Diego study of 300 cases of strangulation, 50% showed no external

signs of injury and 35% showed very minimal signs, leaving only 15% of victims demonstrating injuries that could be photographed by police for use as evidence in court, and the authors noted that even in fatal cases of strangulation there is often no external evidence of injury.⁴¹

- In one retrospective review of 134 cases of survived strangulation it was found that the presence of petechiae – tiny, harmless, red/purple spots on the skin with a range of otherwise benign causes – are more indicative of a severe, life-threatening assault than are marks, bruises or abrasions on the neck.⁴²
- Immediate signs and symptoms may include difficulty breathing, cognitive changes include memory loss and agitation, neck/throat pain, difficulty in swallowing or thick feeling in the throat, raspy or hoarse throat, cough, bruising or swelling inside the lips, tiny red spots anywhere from the neck upwards, conjunctival haemorrhage, tinnitus, loss of consciousness or near loss of consciousness, victim thought she would die, nausea and vomiting, loss of bowel or bladder function at the time of assault, scratch marks or bruising in the jaw line or neck.⁴³
- Strangulation symptoms such as confusion, slurred speech and agitation can easily be overlooked by police and medical staff as drug use or mental health issues.⁴⁴
- Strangulation can cause physical and neurological disorders including neck injuries, breathing problems, loss of sensation and speech problems.⁴⁵
- Given the pain inflicted and its potential lethality, experiencing strangulation can induce a trauma response causing problems such as chronic insomnia and post-traumatic stress disorder,⁴⁶ with victims reporting depression, anxiety, nightmares and suicidal ideation.⁴⁷
- The health impacts of strangulation appear to be cumulative with number of strangulations being positively correlated with frequency of negative health outcomes including neck and throat injuries, neurological disorders such as paralysis, memory loss, vision changes, and psychological disorders including depression and PTSD.⁴⁸
- This review found the evidence supporting a definitive causal link between non-fatal strangulation and delayed stroke was not well established. While it is known that blunt cerebrovascular injury greatly increases the chances of stroke⁴⁹, and that carotid and vertebral artery injuries can be caused by non-lethal strangulation⁵⁰ the direct causal link between strangulation and delayed stroke is evidenced by only a handful of case studies whereby controlling for other variables such as chronic health conditions, lifestyle factors, and other causes of injury to the neck region (e.g. blunt force trauma) was not possible.⁵¹
- There are documented cases of miscarriage following non-lethal strangulation in DFV,⁵² although a direct causal link is not established in the literature.

3.4 Health responses to non-lethal strangulation

Attention and research into health sector responses to non-fatal strangulation has considered the assessment and management of the health needs of the victim, with a focus on gathering useful forensic data to support prosecutions. Discussion in the

literature operates from an assumption that comprehensive medical screening will result in better health outcomes for women, and that better forensic evidence gathering will result in a reduction in DFV. While both assumptions are reasonable, little if any comparative evidence is cited. Regardless, numerous protocols for assessing and documenting non-lethal strangulation have been developed across multiple jurisdictions.

Regarding forensic medical examinations and their use in courts, it is important to note that much of the literature relating to the gathering of forensic data on non-lethal strangulation in DFV is from work undertaken in the United States, with no studies on the topic within Australian federal or state jurisdictions. Some key factors that may impact on the applicability of US data to the Queensland context include social and cultural differences between the jurisdictions, differences in laws and their intent, different health systems, and the fact that the Queensland Police Service exercises state-wide jurisdiction as opposed to the municipal basis of law enforcement agencies in the US. An example of a key difference between the American and Australian systems is that most American states have mandatory reporting, requiring health workers to report all suspicions of domestic violence to law enforcement.⁵³ Mandatory reporting is likely to mean that DFV victims are less candid about their injuries and experiences.⁵⁴ The forensic data required to successfully prosecute perpetrators of strangulation in Queensland is not yet known but is likely to be closely monitored by forensic medical staff.

In their review of literature, the International Association of Forensic Nurses (the association) acknowledges that most health service providers lack training on assessing and documenting non-lethal strangulation, and takes the position that morbidity and mortality rates would benefit from a standardised response to the identification and treatment of strangulation within healthcare contexts.⁵⁵ The association also notes however that there is a paucity of evidence to support any one set of protocols or approaches to this response.⁵⁶

This view is supported in Pritchard et al's⁵⁷ review of the available literature – the most comprehensive to date - which reveals that, in spite of almost two decades of advocacy and training on the issue, forensic documentation is generally insufficient for criminal prosecution, as is the evidence base to support improvements. The authors found that there is a lack of scholarly forensic science and medical research into non-lethal strangulation and that the evidence is compromised by a lack of standardised definitions and measures.⁵⁸ The authors make no recommendation for a set of health protocols, but they do recommend increasing awareness of the risks, signs, symptoms and health outcomes for victims of non-lethal strangulation, and make further recommendations regarding documentation for use in criminal courts by police and medical staff.⁵⁹

The evidence supports better practice in screening for non-lethal strangulation and highlights the importance of first responders and health workers to employ behaviour-specific questioning to elicit information from victims who may not link symptoms with strangulation experiences.⁶⁰

4. Jurisdictional overview

(scroll to pp8-9)

Jurisdiction	Legislation	Health Responses	Police responses
Queensland	In April 2016 laws were passed in Queensland making non-lethal strangulation and suffocation a separate criminal offence with a maximum penalty of 7 years jail. The offence is not contingent on an intention to commit another offence, or on rendering the victim unconscious.		
New South Wales & Australia Capital Territory	Both jurisdictions define an offence that applies if a person intentionally chokes or strangles another person so as to render the other unconscious or insensible. It has been noted that the requirement to render the victim unconscious is unnecessarily exclusionary for use in many DFV prosecutions. ⁶²	There may be local/regional efforts to provide information and formal guidance to the health workforce regarding non-lethal strangulation. For example, the Gold Coast Hospital and Health Service is currently considering how a health response to non-lethal strangulation may be incorporated into the integrated service response to DFV in their region. No indication of formal policy and practice reform could be found via publicly available information sources.	All states have clear operational procedures for police officers to guide responses to domestic and family violence, and most of these acknowledge strangulation as a risk factor for escalating levels of harm. ⁶¹ To date however, no state has operational procedures specifically related to identifying, documenting and investigating strangulation in DFV cases. It is unknown if any state has an intention to develop such procedures/protocols.
Tasmania and Northern Territory	The Criminal Codes of Tasmania and Northern Territory include the crime of strangulation, but it is tethered to an intention to commit a separate offence creating a clear limitation to its applicability to non-lethal strangulation in cases of DFV.		
South Australia, Western Australia & Victoria	These states have no offence that specifically relates to strangulation, and will prosecute general assault-related offences. A recent Royal Commission into DFV in Victoria made no recommendations regarding legislative reform in the area of strangulation in DFV.		

New Zealand

In April 2017 new laws were passed in the New Zealand Parliament making non-fatal strangulation a new stand alone, family violence criminal offence punishable by up to 7 years jail.

To support the operationalisation of the new legislation the New Zealand cabinet is proposing the development of codes of practice to establish shared obligations on government agencies and service providers when responding to incidents of non-lethal strangulation.⁶³

In 2016, the Ministry of Healthy published their Family Violence Assessment and Intervention Guideline, which includes a clinical guideline for the assessment and management of strangulation by health staff, strangulation discharge information and an acute post-strangulation documentation form.⁶⁴

Resources allocated for additional police to operationalise a range of DFV legislative reform, including new stand-alone strangulation laws.⁶⁵

New Zealand Police have comprehensive family violence policy and procedures that provide guidance for identifying, documenting and responding to suspected cases of non-lethal strangulation in domestic and family violence situations.⁶⁶

USA

17 states in the USA, as well as the federal jurisdiction, now have criminal laws that directly address strangulation within the context of domestic and family violence. A further 25 states have laws that directly address the offence of strangulation but with a broader application.

Alaska appears to be the only state jurisdiction with a detailed protocol for health staff in identifying, assessing and documenting cases of non-lethal strangulation in DFV cases. The state of New Hampshire has a detailed clinical protocol in relation to strangulation, but within the context of sexual assault.

A small number of counties (most notably San Diego) have trialled or implemented comprehensive protocols for health professionals. It is not known how many, however a desk top scan reveals five counties with health protocols/guidelines dealing with strangulation.

Alaska appears to be the only state jurisdiction with a detailed protocol for use by police in identifying, assessing and documenting cases of non-lethal strangulation in DFV cases. Two states, Maryland and Massachusetts, have recently encoded in law the obligation to develop and implement compulsory protocols and/or training with regards to investigating strangulation within the context of domestic violence.

A small number of counties appear to have specific strangulation protocols for law enforcement officers.

Canada

The Canadian Criminal Code identifies the offence of strangulation but requires it to be undertaken with the intent of rendering the victim unconscious.

It is worth noting also that following a thorough examination of the issues, the Criminal Section Working Group on Strangulation (the CSWGS) determined not to create a discrete offence of strangulation, making recommendations instead for broad-ranging training of health and criminal justice officers in identifying and responding to situations of non-fatal strangulation.⁶⁷

In 2009 the Victorian Order of Nurses for Canada developed a protocol for frontline workers, including nurses and medical staff, and crisis advocates.

The CSWGS recommended training for medical practitioners to ensure effective documentation, investigation and prosecution of strangulation cases and that best practice standards be developed.⁶⁸ It is unclear if these recommendations were implemented.

It is not clear from publicly available sources if the CSWGS recommendations for further education and training to police and prosecution services in the investigation and prosecution of criminal offences were implemented.

5. Summary

The body of knowledge on the issue of health responses to non-lethal strangulation in DFV is not extensive and will continue to develop over time. There is a lack of scholarly forensic science and medical research and what does exist lacks standardised definitions and measures.

There is currently no evidence to support the implementation of any formal, comprehensive and/or mandatory medical assessment and screening protocol for all women victims disclosing strangulation in DFV, either as an effective way of managing women's health needs, or as a way of preventing domestic homicide.

What is clear to date is that non-lethal strangulation indicates increasing levels of violence and a heightened risk of actual or attempted homicide, has a higher-than-previously-thought prevalence rate amongst women who have experienced DFV, that the symptoms may be more serious and less visible to police, first responders, and emergency medical staff than originally thought, and that health assessment and documentation may be important to achieving criminal convictions.

In short, non-lethal strangulation in domestic and family violence is a key issue that requires a response. However, without a strong evidence base to support any one health system response it is essential that consideration be given to the risk of unintended/unforeseen outcomes. It is important that a focus on strangulation does not obscure or eclipse identification of and responses to other important indicators for an escalation in DFV risk. Additionally, while holding perpetrators to account and securing criminal convictions is important, the core business of our public health system is to deliver high quality, safe and sustainable health care to all Queenslanders.

Subsequent to consideration of the evidence to date, the Department of Health is of the view that the following responses may be useful:

1. Development (with appropriate clinical input) and distribution of a fact sheet that a) provides first responders and emergency department staff with clear and concise information regarding the incidence, symptoms and risks of non-lethal strangulation in DFV; and b) recommends that first responders and medical staff ask victims of DFV about their experiences of non-lethal strangulation and tailor clinical assessment and treatment accordingly; and c) reinforces the importance of clinical documentation.
2. Supporting the health workforce to access training that will increase their knowledge and skills in identifying and responding to cases of non-lethal strangulation in DFV.
3. Supporting participation, as appropriate, in research opportunities that apply methodological and analytic rigour, and that can make valuable contributions to the body of knowledge in Queensland.

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