Position Statement: Non-Fatal Strangulation (NFS)
Practice Recommendations for Forensic Nurses

Description of Issue

Sauvageau & Boghossian (2010) first proposed to classify asphyxia into four main categories: suffocation, strangulation, mechanical asphyxia, and drowning. Additionally, these authors defined strangulation as the partial or total restriction of the breath and/or blood vessels through pressure to the neck using ligatures or via manual strangulation (e.g., hands, arms/chokehold), affecting blood flow to the brain and oxygen to the lungs. Forensic nurses should assess injuries and provide appropriate interventions in response to patients reporting non-fatal strangulation (NFS), testify on the significance of NFS, and discuss strategies for preventing NFS.

Background

For many years, medical training for the identification of IPV injuries, including head injuries and strangulation, were often overlooked. In their original descriptive study, Monahan & O'Leary (1999) explored missed opportunities in assessing victims of IPV, who did not have visible injuries, for head injuries and the long-term health consequences. Strack et al. (2001) first published a seminal study that specifically evaluated the lack of visible injury that was present in many NFS cases, leading medical providers to frequently underestimate the prevalence and severity of this mechanism. The Training Institute on Strangulation Prevention was launched in 2011 and has contributed to awareness, training, technical support, and overall enhancement of knowledge regarding strangulation (The Training Institute on Strangulation Prevention, 2022; 2023 a; 2023b). Patch et al. (2018) further contributed to the understanding of

NFS, specifically within the context of Intimate Partner Violence (IPV), with an integrative literature review that provided a framework for future inquiry.

NFS is used to display power and control over another person and generally occurs during chaotic and violent interactions (Monahan et al., 2019; Nemeth et al., 2012; Thomas et al., 2014). Several different categories of strangulation exist, including hanging; ligature strangulation; manual, and positional (Shields et al., 2010). These categories all involve mechanical interruption of blood, air, or both and can lead to neurological insult, loss of consciousness, and death.

During the acute post-injury phase of NFS seizures, strokes, cardiac arrest, traumatic brain injury (TBI), intracerebral edema and hemorrhages may occur (Emergency Nurses Association, 2016; Hori et al., 1991; Milligan & Anderson, 1980; Smith et al., 2001). Cognitive deficits in other hypoxic–ischemic encephalopathies, such as memory and executive function impairments, may also occur (Wong et al., 2014). A sore throat is a common complaint from strangulation, followed by reported voice changes (Stanley & Hanson, 1983). Other symptoms associated with neurovascular compromise, such as headache, dizziness, blurred or decreased vision, restlessness, or memory loss, may be reported (Emergency Nurses Association, 2016; Wilbur et al., 2001). Loss of consciousness and bowel or bladder control may also be described (Foley, 2015; Strack et al. 2001). NFS can result in arterial dissections, leading to a stroke weeks later. Similarly, airway trauma can cause delayed airway obstruction from tissue swelling (Jockers-Scherübl, 1993; Monahan et al., 2019; Monahan et al., 2020).

The National Intimate Partner and Sexual Violence Survey (NISVS) indicates that one in three women and one in four men have experienced Intimate Partner Violence (IPV) during their lifetime (Black et al., 2011). Additionally, a 2001 landmark study indicated that 89% of victims experienced NFS during IPV experiences, and 50% had no visible injuries (Strack & Gwinn, 2011). While many healthcare providers only associate NFS with IPV, it is also present in non-IPV situations, such as stranger or acquaintance assaults, child maltreatment, elder maltreatment, combat sports, and law enforcement applied restraints (Stellpflug et al., 2022).

Clinical Practice Recommendations

Clinical presentation among patients who have experienced NFS can vary, including no visible injury. Patients may not disclose strangulation when describing their experience. Directly asking about strangulation is an important aspect of clinical care. Patients often describe strangulation using words such as “choking” or “choked.” Choking, or an internal airway obstruction, is often used interchangeably with strangulation by the lay public, therefore forensic nurses should clarify when this term is used by patients. Patients may also use other descriptors that can be related to experiencing NFS, such as “I couldn’t breathe,” “I lost control of my bowels,” “I passed out,” “Everything was fuzzy,” “I was dizzy,” “I had a head rush,” “Everything was black and white,” and “I lost control of my bladder” (Emergency Nurses Association, 2016). Use open-ended questions for further clarification. Objectively and concisely document the patient’s description of what occurred.

Patients who have suffered a NFS event should have a thorough physical and psychological assessment, including a detailed neurological assessment. This includes a detailed

and comprehensive evaluation of the head and neck, throat, and mouth. Screenings for TBI may also be considered (Kwako et al., 2011; Valera et al., 2022; Valera & Kucyi, 2017). Measurements of the neck circumference can assist in monitoring for edema. The use of a clinically based evaluation tool is considered best practice for a patient with a history of strangulation. The guidelines from the Training Institute on Strangulation Prevention (2022) should be consulted for imaging recommendations on any adult or adolescent that has experienced NFS. In the absence of imaging, or in cases of positive imaging results, patients may need to be admitted. In instances of pregnancy, further OB-GYN consultation and fetal monitoring may be indicated. A trained behavioral health specialist should be consulted for all patients who disclose suicidal ideation or have another psychiatric emergency.

A coordinated medical and nursing response to the trauma of NFS is recognized as contemporary best practice. The Emergency Nurses Association (ENA), American College of Emergency Physicians (ACEP), and American Academy of Neurology have published policy statements citing NFS as a serious, potentially lethal mechanism of injury (American Academy of Neurology, 2021; American College of Emergency Physicians, 2021; Emergency Nurses Association, 2016). Patients affected by NFS require immediate medical attention. Safety and psychosocial needs must also be met, including emotional support, crisis intervention, risk assessment, safety planning, and follow-up care. The ENA (2016) has stated that a forensic nurse with specialized training in medical forensic examinations and legal testimony would be the most appropriate person to care for a patient with suspected strangulation.

AFN Position

The Academy of Forensic Nursing recognizes that strangulation is a dangerous mechanism of injury and can be fatal. The Academy supports the following:

1. Forensic Nurses should assess all patients affected by interpersonal violence including, IPV, sexual violence, child and elder maltreatment, and neglect for NFS.
2. Forensic Nurses should be aware of the signs and symptoms of NFS & remain competent in the recognition, assessment, and recommended interventions.
3. Forensic Nurses should utilize evidence-based and systematic guidelines for the evaluation and management of patients who experience NFS.
4. Forensic nurses should participate in collaborative interdisciplinary approaches for the assessment, safety planning, and interventions for patients affected by NFS.
5. Forensic Nurses should be knowledgeable about the epidemiology of NFS, as well as evidence-based and trauma-informed approaches to providing accurate assessment and effective patient interventions.
6. Discharge instructions for patients evaluated for strangulation should include instructions on potential health complications that can appear a few days after an NFS event and where to seek help if complications occur.

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