



E32 Forensic Evidence and Investigation Implications in Domestic Violence Incidents Involving Non-Fatal Strangulation

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Learning Overview: After attending this presentation, attendees will: (1) understand the nature and extent of domestic violence incidents involving Non-Fatal Strangulation (NFS); (2) be able to recognize the physical symptoms and injuries associated with NFS; (3) be aware of the forensic evidence and investigative implications of these incidents; and (4) be able to identify additional correlates and risks associated with NFS.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by increasing competence in response to NFS domestic violence incidents. This presentation will increase recognition of physical signs and symptoms and other important forensic evidence and will investigate implications in these incidents. Specifically, this presentation will allow attendees to identify evidence and additional correlates and risks associated with NFS in domestic violence incidents and will also give first responders and investigators information about an underresearched area.

It is estimated that the number of women who experience NFS is at least 10% and could be as high as 68% for female victims of Domestic Violence (DV).¹⁻⁴ It is also estimated that between 22%-35% of women who visit the emergency room are there for medical problems related to DV, and one out of every three female trauma patients is a DV victim.⁵ Unfortunately, most victims of NFS will not seek medical treatment and law enforcement frequently misses, or fails to properly document, the external evidence, signs, and symptoms of strangulation.²⁻⁶⁻⁹ While some research indicates that 40% of DV victims were strangled, only about 10% actually reported to law enforcement and emergency personnel that they had been strangled and were experiencing physical symptoms.^{10,11} Increasing their risk, victims of DV who experience NFS are *seven times more likely* to be victims of attempted homicide and *eight times more likely* to subsequently become victims of a homicide.^{1,6,7,12-14} The children of victims are also at risk. The presence of children to NFS in DV incidents also places them at risk of adverse health effects, and estimates show that between one and ten children are at risk because of exposure to DV.¹⁵ In addition to adverse impacts on the child, the presence of a child in a DV incident may increase the strangulation risk to the victim. In approximately half of strangulation cases, children were present at the time the victim was strangled.⁸

This presentation examines NFS DV incidents involving victims seeking services from One Safe Place Family Justice Center (OSP) in Fort Worth, TX, from January 1, 2016, to June 30, 2017 ($n=1862$). Researchers collected and analyzed OSP client records from numerous sources: (1) intake and incident forms (e.g., previous victimization, children, relationship characteristics, nature of abuse); (2) a danger assessment instrument (e.g., risk factors associated with homicide in violent relationships); and (3) a strangulation questionnaire administered to clients reporting strangulation in the danger assessment instrument (e.g., frequency of strangulation, symptoms, and injuries).

The findings include descriptive data regarding the nature and extent of strangulation physical symptoms and other factors that provide important forensic and investigative implications. Researchers also utilized logistic regression to determine correlates of NFS. Preliminary results indicate that 56% of the sampler had been strangled ($n = 663$), 73% of these victims reported they had a child under the age of 18, and 48% indicated they had children in the household who were not the offender's biological child. Victims also reported an array of physical strangulation symptoms: difficulty in breathing (68%); lightheaded or dizziness (54%); vision or hearing issues (27%); loss of consciousness (53%); and some reported the loss of bodily functions (12 reported urination and 2 reported defecation). Post-strangulation incident, victims reported: bruising (56%); difficulty swallowing (42%); difficulty breathing (33%); and changes in their voice (35%). Only 5.5% of strangulation cases had no law enforcement involvement, and 74% of victims did not seek medical treatment for their injuries.

When cross-referencing danger assessment scores with the occurrence of strangulation, it was discovered that 72% of victims in the extreme danger range had been strangled (versus 28% that had not been strangled). The difference between the two groups was statistically significant. Logistic regression results indicate that victims are also *significantly more likely to experience strangulation* if: their abuser has previously threatened to kill them; if the abuser has previously avoided arrest; if children present were not related to the abuser; if verbal and physical abuse had previously occurred in front of children; and if the offender had beaten the victim while she was pregnant. In addition, the practical implications for evidence collection and investigation in NFS incidents will be presented.

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Non-Fatal Strangulation, Forensic Evidence, Investigation