

BRIEF COMMUNICATION

Examining trends in non-fatal strangulation among sexual assault survivors seeking Sexual Assault Nurse Examiner care from 2002-2017

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SYNOPSIS

Non-fatal strangulation associated with sexual assault is a public health problem affecting female survivors, especially those assaulted by current/former partners or strangers.

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Non-fatal strangulation (NFS) is a global public health and human rights issue.[1] Prevalence estimates of NFS in sexual assault (SA) range from 7.4% to 12%.[2-3] Strangulation associated with SA poses a lethality risk, both at the time of assault and through risk for future strangulation. If the assailant is an intimate partner, a heightened risk exists for future attempted and completed homicide.[4]

This study explores prevalence, trends, and characteristics of SA involving NFS using a retrospective descriptive analysis of Sexual Assault Nurse Examiner (SANE) cases at one academic hospital in the Midwestern United States from 2002-2017. Data were extracted from systematic statewide SANE data collection forms and SANE notes for females after menarche and males ≥ 13 years (considered adults through the hospital protocol). The institutional review board of the hospital approved the study procedures. Descriptive statistics and chi-square tests were computed in SPSS version 25 (IBM, Armonk, NY, USA); $p < 0.05$ were considered significant.

Of 856 cases, 95.7% of survivors were female and 61.1% were white. The average age was 24.16 years. In total, 5.1% of cases involved NFS. All NFS survivors were female, with 11.3% of females experiencing NFS. NFS was more common when current/former partners (18.9%) or strangers were assailants (16.6%), compared to family members (11.1%) or friends/acquaintances (7.9%; $\chi^2(4)=9.72$, $p=.045$). NFS occurred more often in cases involving weapons than in cases without weapons (30.0% vs. 9.1%; $\chi^2(1)=15.50$, $p<.001$). Additionally, NFS occurred more frequently in cases with anal penetration than cases without (22.7% versus 7.5%; $\chi^2(1)=16.19$, $p<.001$). NFS appears to increase over time (Fig. 1). The mean number of NFS cases annually was 1.8 from 2002-2007 (range 0-3), 2.4 from 2008-2012 (range 1-5), and 4.6 from 2013-2017 (range 3-6).

These results indicate that NFS is common in SA involving females. Our findings are consistent with research showing that survivors experiencing SA by current/former partners are at an increased risk of lethality,[2-3] followed by SA perpetrated by strangers. Furthermore, many survivors face a heightened risk of lethality through the combination of weapons and strangulation. It is possible that NFS is increasing, but

more data are needed. This study was limited by the small number of NFS cases and data from one hospital, which may not be representative of cases at other health centers. However, the strengths include the large sample size and systematic data collection. These results highlight the importance of screening for strangulation when survivors of SA present for care and the need to tailor interventions based on lethality risk.

AUTHOR CONTRIBUTIONS

LMC conceived the study, compiled and analyzed the data, and wrote the first draft of the manuscript. JMB, SDE, ASI, & LS conceived the study and revised the manuscript. KGB compiled the data and revised the manuscript. MLMK conceived the study, compiled and analyzed the data, and revised the manuscript.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

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FIGURE LEGEND

Figure 1. Number of non-fatal strangulation cases associated with sexual assault per year (2002-2017).

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