



E19 A Ten-Year Study of Suicides From a Rural/Suburban County

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The goal of this presentation is to share trends in suicide data compiled over ten years in Dutchess County, NY.

This presentation will impact the forensic science community by providing suicide data compiled in a rural/suburban setting for reference and comparison by medicolegal investigators and pathologists.

This data was based on reporting and examination standards recommended by the National Association of Medical Examiners and Department of Justice death investigation standards. Specifically, this study looks at suicide data from 2003 to 2013 collected from autopsies and external examinations reported to the Dutchess County Medical Examiner's Office. Almost 300 cases were analyzed using Statistical Package for the Social Sciences (SPSS) 20.0 in terms of the deceased's gender, age, race, presence of a suicide note, method of suicide, and weapon used. More than $\frac{3}{4}$ of the cases were male and less than $\frac{1}{4}$ were female, agreeing with the 2011 reporting of the Centers for Disease Control and Prevention (CDC) which states that 78% of all suicides are male.¹ The large majority of the deceased were White, with Blacks and Hispanics at less than 6% each. There was a wide variety of ages ranging from 15-94 years of age, with an average age of 49.29, and a standard deviation of 18.11. The largest age group was 46-55 years of age, with just over $\frac{1}{4}$ falling into this age bracket. This also matched other studies that indicate the highest rate of suicide is in the 45-54 years-of-age group.^{1,2} Only four cases were juveniles. There was no significant difference in the average age for men and for women.

Research shows quite a discrepancy in the percentage of suicides in which a note is found. Eckert and Helpert state about $\frac{1}{3}$ of victims left a note; in contrast, a study by Tewksbury, Suresh, and Holmes found 26.3% of males left a note, and a study by Shaw et al. that only looked at adolescents, found that 39% left a note.³⁻⁵ Furthermore, while there is much research about the content of notes, little more has been said about the presence of notes. In this sample, just over 40% of the cases left a suicide note, but there was no significant difference in the presence of a note for men or women, for different races, or for different age groups. Most common methods of death were gunshot wounds, hanging or asphyxia, and overdose, which is consistent with CDC data and other studies.^{1,4,6,7} The remaining methods include carbon monoxide or other poisoning, blunt force trauma, sharp force, drowning, or self immolation. Numerous studies cite that men are more likely to commit suicide by violent means, such as gunshots, whereas women are more likely to commit suicide by poison.^{2,7,8} Results from this study agree with other reports showing significant differences for method of death both in terms of age and gender, with men more likely to choose gunshot and women more likely to choose overdose. Furthermore, the older the deceased was, the more likely they were to commit suicide by gunshot, and the younger they were, the more likely they were to commit suicide by overdose. Of note, all four juveniles committed suicide by hanging. Statistical analysis could not be performed for race and method of suicide due to small numbers of other races, but there were interesting trends that will be discussed.

Lastly, the weapon used for method of death will be discussed as time permits. Specifically, the type of gun used, classified as handgun, shotgun, or rifle; materials used for hanging, which include ropes, cords, belts, sheets, and shoelaces; different gases used for poisoning; and weapons used in blunt force trauma cases.



General Section - 2015

References:

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Suicide, Suicide Note, Suicide Method