



Pathology Biology Section - 2012

G60 Female Suicides by Firearm From 1990 - 2010 in Montgomery County, Ohio

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After attending this presentation, attendees will understand trends relative to firearm suicides by females over a 20-year timeframe in Montgomery County Ohio, an area encompassing 460 square miles with a population over 535,000.

This presentation will impact the forensic science community by examining female suicides by firearm and identifying any trends relative to age, sex, race, firearm type, wound location and alternate methods of suicide. This data can be used to compare to other studies to determine any geographical trends related to firearm suicides by females.

Suicide continues to be a very sensitive topic and significantly impacts families and the community at large. Firearm deaths have become commonplace in today's society and usually are seen in homicides, followed by suicides and accidental deaths. Although firearms are a predominate mode in male suicide, it has had a lower representation in female suicide. Montgomery County Coroner's Office began seeing higher numbers of female suicides by firearms and a study was conducted in order to determine the significance of these numbers and if they translate to an increase in rate for female suicides over time. In addition, Montgomery County Coroner's Office began seeing females in higher age categories selecting firearms as the mode for suicide; therefore, the study addressed age as well, in an effort to determine rate and if there was statistical significance to the findings. A total of 30 of the 87 cases involve females age 55 and over. Another interesting aspect is wound location, with Montgomery County Coroner's Office seeing a higher number of cases involving gunshot wounds to the head, versus historically seen wound locations of the chest and abdomen.

It is imperative for coroners and medical examiners to understand identified trends in order to determine fluctuations within their jurisdictions. It is vital for communities to understand trends associated with suicides. By identifying trends for our serviced communities, various services can be provided, or actions can be taken in order to design suicide prevention programs in an effort to prevent additional deaths. An example of this can be seen in Ohio where a number of pain management clinics have been shut down in the southern part of the state due to the amount of pain medication being distributed, resulting in overdose and death. By taking action, it will be interesting to see if the affected counties see a downward trend in overdose deaths.

This presentation will discuss the analysis of 87 female suicides by firearms over a 20-year period in Montgomery County Ohio. Analysis will include age, sex, race, firearm type, and wound location and determine if these factors are statistically unique for females as compared to male suicides by firearm for the same period of time. In addition, other methods of female suicide will also be compared to determine if there is statistical significance relative to female suicide by gunshot in the 324 female suicides from 1990 - 2010. Rates per 100,000 will be calculated for each year on each method for the population of Montgomery County, which has declined from 573,809 in 1990 to 535,153 in 2010.

Suicide, Firearm, Gunshot Wound