

General Section – 2007

D4 Autopsy, Medical Examiner/Coroner System, and Decedent Characteristics: 1979-94 and 2003-04

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After attending this presentation, attendees will learn current autopsy performance prevalence, variance according to types of state medical examiner/coroner systems and decedent characteristics, and how patterns have changed over time.

This presentation will impact the forensic community and/or humanity by providing recent data on autopsy performance trends in the United States, a key indicator that has not been available since 1994. The elimination of the item in 1995 was criticized in a letter to the editor of JAMA (Hanzlick, National Autopsy Data Dropped, JAMA, vol. 280, p. 886) as a problem for performance measurement, compliance, and national data analysis. The reinstatement of the item rectifies this.

Purpose: The purpose of this study was to examine 1) whether the percentage of deaths that were autopsied varied by medical examiner/coroner system, 2) whether the underlying cause of death among autopsied decedents varied by medical examiner/coroner system,

3) whether the characteristics of the decedents that were autopsied changed over time.

Methods: The study variables were drawn from death certificate data for the United States. Variables that were selected from the death certificate for the study were: if an autopsy was performed, age, race, sex, cause of death and the place of death. Percentages, ranking procedures, and statistical modeling were used to present the data and to describe the temporal trend.

Results: There was a decreasing trend for the performance of autopsy in the United States from 1979 to 2004. The percentage of deaths that were autopsied was higher in States with mixed medical examiner/coroner (me/c) systems than in States with coroner systems or medical examiner systems. The percentage of deaths that were autopsied was the highest for homicide (98.6%), SIDS (98.5%), and other external causes (79.5%) across all types of me/c systems. Being young, nonwhite, male, dying in the emergency room or dead on arrival also were associated with higher levels of being autopsied. Some of these characteristics reflect differences among subgroups in age and circumstances surrounding death.

Conclusion: Over the years, there is common ground in which deaths have an autopsy performed across types of me/c systems with homicide deaths most likely to be autopsied. Despite the value of autopsies, there is a decreasing trend in autopsy performance. The implication of the study results will be discussed.

Autopsy, Death Certificate, National Vital Statistics System