



Pathology/Biology Section - 2014

G111 Making the Cut: Patterns of Association Between Victims, Suspects, and Body Treatment in Postmortem Dismemberment Cases

Andrew C. Seidel, MA, Arizona State University, Human Evolution/Social Change, PO Box 872402, Tempe, AZ 85287-2402; and Laura C. Fulginiti, PhD, Forensic Science Center, 701 W Jefferson, Phoenix, AZ 85007*

After attending this presentation, attendees will appreciate how the characteristics of homicide cases involving postmortem dismemberment of the corpse differ according to the sex and age of both the victim and the suspect as well as how patterns derived from a larger sample of such cases compare to a series of ten dismemberment cases from Maricopa County, Arizona.

This presentation will impact the forensic science community by providing data that suggests that the demographics of the victims in dismemberment cases as well as how the body was treated may be associated with certain characteristics of their killers. This information has potential utility both in generating and prioritizing lists of potential suspects.

Published accounts of 94 homicide cases involving postmortem dismemberment were taken from the literature and information regarding the age and sex of both the victim and the suspect, the relationship of the victim to the suspect, the cause(s) of death, the minimum number of body segments produced by the dismemberment, and the manner of disposal of the body were recorded and compiled into a database. Where data were sufficient to permit statistical analysis, such analyses were carried out with a significance level of $\alpha=0.1$. Patterns were sought between variables, especially as related to the age and sex of both the victim and the suspect, and any patterns that were identified were then compared to a series of ten dismemberment cases from Maricopa County in an effort to see if these patterns held when applied to novel cases.

Results from the compiled database suggest that male and female victims differ significantly in terms of the relationship that they held with their killer (Fisher's Exact Test, p -value = 0.0001204). Female victims were more frequently killed by people with whom they had an intimate relationship and males were more often killed by acquaintances. Male and female victims also significantly differed in terms of their causes of death (Fisher's Exact Test, p -value = 0.07624), with strangulation a more frequent cause of death for female victims, and some variety of sharp force trauma more frequent among males. Although missing data within the published accounts preclude statistical verification, the data also suggest that female victims tend to be sectioned into more pieces than male victims, that a body sectioned into more than six portions is much more frequently associated with a male suspect, that female suspects tend to kill intimate relations, that strangulation is more frequently employed by suspects younger than 35 years of age, and that older suspects tend to section decedents into a larger number of pieces than younger suspects.

A series of ten dismemberment cases from Maricopa County, Arizona, were used as a comparative sample to evaluate the patterns identified above. Contrary to the trend identified in the compiled database, only one female victim from Maricopa was killed by an intimate. In four of the six cases involving male victims, the suspects were acquaintances of the victim, which generally supports the pattern noted above. Differences in the cause of death as described above are not evident in the sample of cases from Maricopa. Likewise, the associations of strangulation with younger suspects and hyper-sectioning of the corpse with male suspects are absent in this sample. However, the remainder of the trends noted above is generally borne out within the Maricopa County cases.

Although rigorous comparisons were rendered impossible due to missing and inconsistently reported data, a number of trends that relate victim characteristics and suspect characteristics were identified and evaluated. These results suggest that, despite differences which might be attributed to regional variations (homicides involving gunshot wounds, for example, were only observed in North American cases), there might be underlying commonalities between homicide cases involving postmortem dismemberment. Some of these commonalities, such as the association of strangulation with younger suspects or that of a large number of cuts with male suspects, might potentially be useful in either generating or prioritizing suspect lists. More complete data are required in order to ascertain whether or not these patterns can be statistically verified; however, the associations identified in this preliminary research provide a guide when analyzing dismemberment cases in a forensic setting.

Postmortem Dismemberment, Victim/Suspect Relationship, Dismemberment Patterns