



### G49 Relevance of the Autopsy as a Medical Tool: A Large Database of Physician Attitudes

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The goals of this presentation are: 1) to examine a large data base of physician attitudes about the value of the autopsy, 2) to attempt to correlate physician opinions about autopsy to their levels of experience with and knowledge of the procedure, and 3) to determine whether there is sufficient interest in the autopsy to make revitalizing it worthwhile as a contributor to medical practice.

**Background:** Autopsy rates for patients dying in hospitals have declined from approximately 50% in the 1950s to at or below 10% of similar patients today. A previous pilot study survey distributed to attending physicians in a large, urban, university hospital center suggested that in spite of this decline, physicians believed strongly in the usefulness of the autopsy. Most disagreed that diagnostic procedures were so accurate that autopsies had become irrelevant, and most disagreed that concern over litigation affected their desire to request autopsies. Given the results in this pilot survey, physicians' positive opinions about the value of the autopsy appeared to contradict their apparent declining requests for the procedure. It became important, then, to confirm that these attitudes hold true in a larger and more varied sample, perhaps more indicative of the population of physicians in general.

**Methods:** This study uses essentially the same survey on autopsy knowledge and opinions that was distributed in the pilot study. A slightly revised survey was distributed to all attending physicians in a second large, university-affiliated medical center and a large military-affiliated medical center. The database of physician responses now includes three major hospitals, two university-affiliated (one private and one public) and one military, as well as one east coast and two west coast hospitals. Including the pilot study, the 10-question survey has now been distributed to 723 full-time attending physicians. The survey was an anonymous, one-page, multiple choice format questionnaire, that could be completed in under five minutes. Clinicians first identified their department, years of practice, and the number of autopsies they had observed or participated in as a student, resident, or attending physician. They then estimated their departmental autopsy rate and opined on the sufficiency of that rate to meet departmental goals for education and research. The remaining questions examined, among other topics, physician belief in the value of the autopsy for confirming diagnostic results, its potential affect on medical practice, the effects of possible litigation on autopsy requests, and how prepared physicians felt to discuss autopsy with families of patients.

**Results:** A total of 113 military physicians and 94 university physicians provided 207 (29%) total responses to the survey. Departmental response rates varied from 13% to 80%, with response rates slightly higher on average at the military facility. Attendance was fairly evenly spread in years of practice from less than 5 to over 20 years. Physicians at the military center had been in practice somewhat longer than their civilian counterparts and, as a result, seemed to have had slightly more exposure to autopsy. However, overall exposure to autopsy by observation or participation was low, with 52% of physicians being involved in fewer than 5 cases (11% responded 0 cases) and only 21% indicating involvement in more than 20 cases over their careers. Respondents in nearly equal percentages (35% and 40%) agreed and disagreed that their departmental autopsy rates were sufficient to meet departmental goals, with this bimodality probably traceable to 46% indicating no knowledge of the rate. Fully 36% (the largest response category by far for this question) could not say whether or not results were reported in a timely fashion. The pattern of responses of military-affiliated physicians did not appear to be statistically different from those of university-based physicians on opinion-based (non-demographic) questions, so the two groups were combined for much of this analysis. Physicians across years of practice, autopsy experience and knowledge, and departments agreed (72%) that autopsy results could affect their medical practice and disagreed (74%) that the accuracy of modern diagnostic procedures makes autopsy obsolete. Interestingly, one of the largest concentration of responses in the survey (77%) disagreed that litigation concerns played a role in the request and use of autopsy. This result directly contradicts one of the principal conclusions in the literature offered to explain declining autopsy rates. Also, in spite of the apparent collective lack of experience with autopsies indicated by responses to the demographic questions, physicians mostly (79%) claimed to be comfortable with discussing the autopsy with family members. However, the most resounding result from the 207 physician responses to the survey appears to be that both military and civilian physicians feel that the autopsy is a relevant clinical instrument and medical tool, even when they have experienced, requested, discussed, or personally used very few of them.

**Conclusions:** The expanded survey data confirms that physicians highly value the autopsy as a clinical tool, in spite of declining rates and decreasing exposure to autopsy over their professional lives. These opinions do not appear to vary significantly across types of institution or years of experience. The survey data does not support (in fact, seems to refute) causes of the decline in the use of autopsy often cited in the literature, i.e., delayed reporting of results, concern over litigation arising from findings, or belief in the accuracy of current



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diagnostic procedures. The next step of this research will be to model the effects of implementing changes in autopsy education and procedures on physician request rate and use. The anticipated changes would include, at minimum, more widespread exposure to autopsies at each stage of medical education, better pathologist to clinician communication, and prompt and relevant reporting. The autopsy, a procedure that physicians claim to value so highly, should not be allowed to become only a forensic tool and slip out of existence as a contributor to medical knowledge.

### **Autopsy Rates, Autopsy Relevance, Physician Attitudes**