

Post-Mortem Cardiac Device Retrieval for Re-Use in Third World Nations: Views of Funeral Directors

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Introduction: The escalating inequality of healthcare between rich and poor countries appears to be widening, especially in the field of electrophysiology. Cardiovascular disease has an increasing impact on morbidity and mortality in many developing countries, many of which already face a disproportionate burden of infections leading to abnormalities of the conduction system. Novel methods of delivering costly electrophysiologic healthcare to impoverished nations are needed. The purpose of this study is to determine the viewpoints of funeral directors regarding post-mortem retrieval and donation of pacemakers (PMs) and implantable defibrillators (ICDs).

Methods: Surveys were sent to 152 funeral directors in southeast Michigan. Survey items were developed to assess current knowledge and opinions regarding utilization of post-mortem cardiac devices.

Results: Ninety surveys (59%) were returned by mail to the University of Michigan. Funeral directors removed an average of 27 PMs and ICDs on a yearly basis mainly for anticipated cremation or per family request. Of these devices, 4% were returned to the manufacturer for analysis while 84% were discarded in medical waste or stored with no purpose. The majority (69%) of funeral directors lacked the knowledge or found it difficult to return devices back to the original manufacturer while 81% supported a central independent organization to regulate device distribution. A minority (10%) of funeral directors have donated cardiac devices for reuse in underserved nations at least once in their lives but 89% were willing to donate the devices to charitable organizations if given the opportunity. Estimated from survey responses, a total of 166 PMs and ICDs are currently stored in southeastern Michigan funeral homes with no intended purpose.

Conclusions: As the prevalence of cardiovascular disease increases throughout the world, innovative methods of delivering healthcare to underserved nations must be explored. An overwhelming majority of funeral directors have the desire and ability to perform post-mortem cardiac device removal for philanthropic reuse in underserved nations if given the opportunity.