

ORIGINAL ARTICLE

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Review of clinical non-medico-legal autopsy: a descriptive study in 747 patients

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Abstract

Background: Autopsies have been an essential element to healthcare professionals' training, as well as to research processes, education, and public health. In spite of the decline of clinical autopsy rate after the Joint Commission on the Accreditation of Hospitals eliminated the minimum autopsy rate required for accrediting hospitals, in Colombia, South America, we have seen that this practice has been reinitiated and our institution has performed more than 200 autopsies per year.

Objective: To describe the main causes of death among individuals to whom a clinical autopsy was practiced at a general hospital in Bogotá, Colombia.

Methods: A descriptive study of autopsy reports during the period between January 2012 and June 2015 was conducted.

Results: The study included 747 autopsies of which 58.2% were performed in males. The majority of deaths occurred among the 41 to 64 years (mean 32.53, SD 28.53) age group. The leading cause of death observed in young adults and middle-aged adults (18 to 64 years) was cardiac arrest (58.5%) associated with acute myocardial infarction, cardiomyopathies, or cardiovascular abnormalities, followed by respiratory conditions (42.6%) and cardiac sudden death as the second cause of death in young adults.

Conclusions: Studies based on clinical autopsies allow precise knowledge on the main underlying causes of death in a population, as well as, enable ideas based on key data obtained to be used in the development of cardiovascular prevention strategies for the different age groups thus preventing fatal outcomes in young adults who are the active working, productive population in society.

Keywords: Autopsy, Colombia, Latin America, Cardiac arrest, Pathology

Background

After 1964 autopsy rates have steadily declined in hospitals of the world. The autopsy rate has fallen from 41.1% in 1964 to only 5% or less in present days, after the Joint Commission on the Accreditation of Hospitals eliminated the minimum autopsy rate required for accrediting hospitals in the USA (25% for teaching hospitals, 20% for non-academic hospitals). In addition, contributing factors such as concern about legal actions if misdiagnosis is detected due to unexpected findings, higher expenses for the

pathology services for these are high-cost procedures given the staff and supplies involved, failure to retrieve the autopsy report, and personal reasons such as social phobias, as well as, reluctance of relatives to give autopsy consent and social and cultural barriers, have generated a global trend resulting in a drop of present autopsy rates (Roberts 1978; Clayton and Sivak 1992; Petri 1993; Hasson and Schneiderman 1995; Horowitz and Naritoku 2007).

In the late nineteenth century and early twentieth century, various studies on mortality statistics based on autopsies were conducted in North and Central America. One of them was carried out by the Autopsy Committee of the College of American Pathologists (CAP) to improve performance and reporting of the autopsy and to promote the utilization of the autopsy for quality

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