## **EDITORIAL**

# And We Doctors, What do We Die of?

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Editorial referring to the article: Mortality from Cardiovascular Disease

Editorial referring to the article: Mortality from Cardiovascular Diseases: A Comparative Analysis between the Medical and Non-Medical Populations in Brazil

We hardly ask ourselves what we will die from. The certainty of this fact can even pass through our thoughts, but it always seems to us something far away and impossible to predict. We can know the causes of death of our fellow human beings to try to predict our death and perhaps use measures to postpone it, since it is impossible to avoid. Societies need to know their numbers, how many we are, how many are born, how many die, how we die, and how we live. These are questions that gain importance with reports of demographic and epidemiological surveys dating back to 400 BC in some ancient civilizations like Greece, Rome, India, and China. The first modern publication in mortality studies dates from 1662 in England, carried out by a London councilor, John Graunt, who published the work entitled "Natural and Political Observations upon the Bills of Mortality" (Figure 1), using data of burials in London as information. Through this study, it can be known, for example, that one third of London children died before turning sixteen.1,2

In the last century, humanity has gone through an epidemiological transition in terms of causes of death. Infectious diseases are no longer the leading cause of death and have given way to chronic non-communicable diseases (NCDs), especially circulatory system diseases (CAD). NCDs are the main cause of death worldwide, and they are responsible for premature deaths, loss of quality of life, and adverse economic and social impacts. NCDs are responsible for about 70% of global deaths, equivalent to more than 38 million deaths per year, significantly exceeding deaths from external causes

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and infectious diseases. About 45% of all NCD deaths worldwide, more than 17 million, are caused by CAD. A similar distribution is observed in Brazil, where 72% of deaths result from chronic NCDs, with 30% due to CAD and 16% to neoplasms.<sup>3</sup>

Knowing and comparing the occurrences of cardiovascular deaths in a specific professional group, in the case of physicians, with the rest of the population arouses curiosity and can provide important information with the possibility of instituting measures capable of preventing or delaying these deaths. Therefore, analysis of the article in question is very important for our professional group and also for society.<sup>4</sup> Questions that immediately come to mind when we read the title of the article could be answered:

Do we die early? Do we die more? Do we die worse?

Certainly, one or these three questions was raised at the initial moment of reading.

First fact: the doctors who died during the study period, 2014 to 2018, were mostly White men over 60 years old. This is a reflection of medical training and the organization of society with access to higher education and medical schools in the mid-twentieth century. Few women and few Black people became doctors in Brazil at that time.

Ischemic heart disease was, by far, the leading cause of death for the two populations analyzed in the study. This followed the global trend of the main cause of death in recent decades, for all population types, regardless of the geopolitical level of the analyzed country. However, in the medical population, the risk of dying from this group of diseases was relatively higher than in the non-medical population. One factor can be suggested to explain this fact: the higher socioeconomic level of the medical population, which is a group composed

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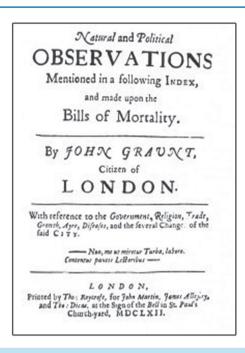


Figure 1 – Cover of John Graunt's publication – Reproduction of the original by Graunt G. Natural and Political Observations upon the Bills of Mortality.

London 1662.

of people who obviously have higher education, could be a protective factor against deaths from other causes, especially when compared to cerebrovascular disease, where relative mortality was twice as high in the nonmedical population.

Two limitations not mentioned in the study's discussion should come to light: the first, the short observation time, 5 years, for a retrospective mortality study. Longer durations could have been included for better evolutionary assessment of deaths, which would generate greater capacity and validity to analyze measures of association between the two groups. The second refers to the following questions: What about retired doctors? Those who died, who were not actively registered in their class councils, were they included in the non-medical population? They certainly died at older ages and could contribute to changes in the outcomes analyzed in the study, especially the mean age of death.

It is very interesting to analyze mortality studies in specific groups. This article provides some answers and also opens space for extension and new research to elucidate and, who knows, propose future measures to prolong life expectancy in the Brazilian medical population.

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