OBJECTIVES: Our study examined age and sex patterns of cardiovascular disease (CVD) mortality among autopsy cases at Korle Bu Teaching Hospital (KBTH) in Accra, Ghana from 2006 to 2010.

Design: All cardiovascular deaths diagnosed at autopsy in the 5-year period beginning January 2006 and ending December 2010 located in the autopsy logbooks of the Department of Pathology, KBTH, were analyzed for this study. A total of 20,706 autopsy cases were done at KBTH within the five year period out of which 19,289 (93.2%) were analyzed for this study. Chi-square tests were used to show the association between sex and CVD deaths.

Results: The results show that CVD constituted more than one-fifth (22.2%) of all causes of deaths from autopsy cases at KBTH within the 5-year period. The proportionate mortality ratio (PMR) for CVD increased with age, rising steeply in mid-life to peak in the very old, accounting for almost 50% of deaths examined by age 85 years. Also, the findings showed that for the five year period, males had higher proportion of CVD death compared to females ($\chi^2=27.284, P=.000$).

Conclusions: In the absence of population-based data, hospital records may serve as a useful tool in epidemiologic surveillance of disease. Thus, efforts should be made at health facilities to document minimal patient characteristics such as the socioeconomic and demographic characteristics to facilitate such studies in the future. In conclusion, further studies may be needed to primarily help in formulating strategies/policies for prevention of cardiovascular disease. (Ethn Dis. 2014;24(1):55–59)

Key Words: Cardiovascular Disease, Mortality, Autopsy, Ghana

INTRODUCTION

The global burden of cardiovascular disease (CVD) has been increasing over time. At the beginning of the 20th century, CVD accounted for <10% of all deaths worldwide. By the start of the 21st century, it was responsible for approximately 30% of all deaths globally. Cardiovascular diseases have been the leading cause of death in high-income countries for the past 6 decades but are fast becoming the leading cause of death in low- and middle-income countries. It is estimated that 80% of all CVD deaths occur in low- and middle-income countries. This rapid increase in CVD deaths is coupled with the continuing and significant risk of death from infectious diseases in these countries, in what global and regional experts refer to as a double burden of infectious and chronic diseases.

In Ghana, CVD is one of the top two causes of death after diarrheal diseases. In Accra, CVD rose from being the seventh and tenth cause of death in 1953 and 1966 respectively, to the number one cause of death in 1991 and 2001 and it has continued as the major cause of mortality in the country since then. Despite this increase in deaths from CVD and other chronic non-communicable diseases (NCDs), Ghana has no national policy to deal with this public health issue, and no effective surveillance system is in place to monitor CVD mortality. The dominant assumption among lay communities and experts in Ghana is that CVD is rare and does not pose a serious public health challenge. Furthermore, Ghana’s health system lacks the optimal resources to address the double burden of NCDs and acute communicable diseases.

Epidemiologic surveillance has been seen as very important in monitoring the burden of diseases in the population. Although population-based data is mostly suitable for such surveillance because it represents the burden of CVD in a particular country, such data rarely exist in many countries in sub-Saharan Africa. In Ghana, the opportunities provided by the establishment of demographic and surveillance systems in 3 ecological zones of the country (Navrongo, Kintampo and Dodowa) to obtain such data have not been fully exploited. However, in the absence of this kind of data, hospital records have been seen as one way of monitoring CVD mortality. Monitoring the pattern of a particular disease for appropriate dissemination is a process that involves ongoing systematic collection, analysis and interpretation of the data. The development of effective interventions for the disease can be compromised in the absence of monitoring.

There are more than 30 years of medical records characterizing mortality cases at the Korle Bu Teaching Hospital (KBTH), in Ghana’s capital, Accra. However, there has been no systematic analysis and interpretation of these data. Without analysis and interpretation of these data, no effective policies can be put in place to address the disease morbidity and mortality in this region. Our study intends to fill this gap by

From Regional Institute for Population Studies, University of Ghana (OAS, JKA, ADCGA); and Noguchi Memorial Institute for Medical Research, College of Health Sciences, University of Ghana (KAK).

Address correspondence to Olutobi A. Sanuade; P.O. Box LG 96, Regional Institute for Population Studies; University of Ghana, Ghana; +233267543244; +233-302-514745 (fax); oluwatobisanuade@gmail.com

Editor’s note: Information from this article was first presented at the Population Association of America 2013 Annual Meeting; New Orleans, LA, April 11–13, 2013: Session 126: Advances in Cause of Death Analyses (http://paa2013.princeton.edu/sessions/126).