Causes of sudden deaths in Ardabil Imam Khomeini Hospital during the years 2018-2019

Abstract

Background: The issue of sudden deaths is a real challenge for health care providers. The present study was conducted in order to identify the main causes of sudden deaths and the frequency of each in Imam Khomeini Hospital in Ardabil.

Aim: To evaluate the causes of sudden deaths in Ardabil Imam Khomeini Hospital during the years 2017-2019.

Materials and methods: This study was a retrospective descriptive study. In this study, all the files of people who died in Ardabil Imam Khomeini Hospital between 2017 and 2019, and the cause of death was diagnosed as sudden death after the necessary investigations, and less than 24 hours elapsed from the onset of symptoms to the occurrence of death, was investigated. After determining and separating the samples of sudden death, the information was extracted by examining the patients' files and recorded in the information collection checklists.

Results: In total, information related to 896 sudden deaths was reviewed: 274 cases (30.6%) in 2017, 324 cases (36.2%) in 2018, and 298 cases (33.2%) in 2019. The gender of 569 cases (63.5%) were male and 327 cases (36.5%) were female. 532 people (59.4%) were over 60 years old. The most common underlying diseases were cardiovascular diseases (38.1%) and diabetes (18%). The cause of death based on the involved system was cardiovascular (68.6%), pulmonary (12.1%), central nervous system (10.4%), disseminated infections (2.3%), and digestive (1.5%) diseases. There was a significant relationship between the cause of death with age group (P=0.030), gender (P=0.001), underlying disease (P<0.001), and history of sudden death in the first degree family (P=0.039).

Conclusion: The results of the present study showed that cardiovascular accidents were the main cause of sudden death in Imam Khomeini Hospital in Ardabil in 2016-2018 (caused about two-thirds of the cases) and then diseases of the pulmonary system and central nervous system were in the next ranks (each causing about a tenth of the cases); Sudden death occurred mostly in males and in the age group over 60 years old; The cause of sudden death was related to age,

gender, having a family history of sudden death, and the type of underlying disease.

Keywords: Sudden death, etiology, Ardabil.