Some Facts about Case Fatality of Acute Myocardial Infarction in Iran

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Dear Editor-in-Chief

Cardiovascular disease is the first cause of death in the world and Iran (1).These diseases have increasing trends particularly in low-and moderate-income countries. According to international reports, mortality from AMI have rising trend (2), and cardiovascular disease (CAD) will remain among the three main causes of the global burden of disease to 2030 (3). Despite a significant reduction in the amount of prevalence of coronary heart disease in many countries and advances in the treatment of patients, case fatality rate following the occurrence of acute myocardial infarction in both sexes has remained high (4, 5). Thus, identifying the most frequent and fatal myocardial infarction and the most important factors influencing survival could have important role in reducing deaths from the disease. In Iran, short-term (28-day) survival rate of patient with first acute myocardial infarction in average was 91%, in male 92.5% and 86.7% in female (6, 7).

The most frequent and fatal myocardial infarction was anterior wall acute myocardial infarction and acute transmural myocardial infarction of unspecified site, respectively (8, 9).

Table 1: Hazard ratio of case fatality rate from acute myocardial infarction in Isfahan, central Iran

Variables	Hazard ratio (Confidence interval 95%)	P-value
Age (yr)	1.05 (1.04-1.06)	<0.001
Acute subendocardial myocardial infarction	1	
Acute transmural myocardial infarction of other sites	2.32 (1.23-4.37)	<0.001
Acute transmural myocardial infarction of inferior wall	2.6 (1.74-3.91)	<0.001
Acute transmural myocardial infarction of anterior wall	4 (2.7-5.9)	<0.001
Acute myocardial infarction, unspecified	8.8 (5.9-12.9)	<0.001
Acute transmural myocardial infarction of unspecified site	18 (10.6 -30.5)	<0.001
Men	1	
Women	1.4 (1.23-1.6)	<0.001

Men, young's and patients with acute subendocardial myocardial infarction had the highest survival rate and women, elderly and patients with acute transmural myocardial infarction of unspecified site have the most hazard ratio of mortality (Table 1) (10). Therefore, with regard to the identification of the most common and fatal and in addition, the most important factors affecting the survival of patients from acute myocardial infarction, should physicians and other health care providers have more attention to this patients. Accordingly, we can finally reduce the case fatality and number of patients that death from this disease.

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