Objectives:
Little is known about the ethnic variability in trends of the etiologies of atrial fibrillation (AF) and related mortality. This was examined in this study in patients hospitalized with AF in a real-world population in a Middle Eastern country.

Methods:
Retrospective analysis of prospective registry of all patients hospitalized with AF in Qatar from 1991 through 2010 was made. Rates and trends of clinical characteristics, cardiac comorbidities and in-hospital mortality were analyzed according to ethnicity.

Results:
During the 20-year period; 2857 Arabs and 548 Asians were hospitalized for AF. Arabs were 9 years older and more likely to have hypertension, diabetes mellitus, chronic renal impairment and dyslipidemia compared to Asians. Valvular heart disease and acute coronary syndromes were more common among Asians while congestive heart failure was more common in Arabs. Overall in-hospital mortality was lower for Asians compared to Arabs while stroke rates were comparable [Table1].

There was an increase in the prevalence of diabetes mellitus and hypertension in both groups in the latter years of the study period but, more so in Arabs when compared to patients hospitalized in the earlier years. Associated valvular heart disease was trending lower in both groups while ischemic heart disease prevalence was trending higher with no significant differences between the two groups. Rheumatic heart disease was statistically trending lower in prevalence; however it remained more prevalent among Asian patients over the study period. There were no significant differences in mortality trends over the study period between the two groups [Table 2].

Conclusions:
The current study is the first ever report of comparative ethnic trends in etiologies and outcome of AF among Middle Eastern Arab and South Asian patients over a 20-year period. The current study underscores the need to study differences in atrial fibrillation among various ethnicities.