

BEST POSTERS AWARDS

ACUTE MYOCARDIAL INFARCTION BEFORE AND AFTER THE STORM: HURRICANE KATRINA

ACC Poster Contributions

Ernest N. Morial Convention Center, Hall F

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Authors: *Irfan Hameed, Socrates Kakoulides, John Moscona, Sudesh Srivastav, Zhen Jiao, Patrice Delafontaine, Anand Irimpen, Tulane University, School of Medicine, New Orleans, LA, Southeast Louisiana Veterans Healthcare System, New Orleans, LA*

Background: Previously we have reported the increase in incidence of AMI after 2 and 3 years of Katrina compare to pre-Katrina.

Objective: To evaluate the difference in acute myocardial infarction (AMI) incidence before and 4 years after the Hurricane Katrina.

Methods: This was a single center retrospective study. Patients admitted with AMI to Tulane University Hospital, in the two years before Katrina and in the four years after the hospital reopened in February, 2006 were compared for pre-specified demographic and clinical data.

Results: In the 4-year post-Katrina group, there were 629 confirmed admissions for AMI out of a total census of 28597 patients (2.2%), as compared to 150 out of a census of 21,079 (0.7%) in the 2-year pre-Katrina group ($p < 0.0001$). The post-Katrina group had a higher prevalence of unemployment (17% vs. 2%, $p < 0.0001$), lack of medical insurance (12% vs. 6%, $p < 0.0001$), smokers (58% vs. 17%, $p < 0.001$), medical non-compliance (25% vs. 7%, $P < 0.0001$), substance abuse (16% vs. 7%, $p < 0.01$), psychiatric comorbidities (10% vs. 6%, $p < 0.05$) history of coronary artery disease (46% vs. 31%, $p = 0.001$), and percutaneous coronary interventions (66% vs. 52%, $p < 0.0001$). More people in the post-Katrina group were single/divorced (30% vs. 26%, $p < 0.05$). There were no significant differences between the two groups in terms of age, race and gender, and history of hypertension, hyperlipidemia, obesity, diabetes mellitus and chronic renal disease.

Discussion: Hurricane Katrina wreaked an enormous long-term physical, psychological, emotional, and social burden on the residents of New Orleans as evident by our data and similar studies. At the 5th-year anniversary, we still find a higher incidence of unemployment, lack of medical insurance, depression, tobacco use, medical non-compliance and acute myocardial infarction. To our surprise this persistent increase in AMI incidence has occurred in the absence of any change in traditional risk factors.

Conclusion: The three-fold increased incidence of AMI more than 4 years after Hurricane Katrina requires further study to identify mechanisms and special efforts from medical personnel and public health services to mitigate the long term effects.