

ABSTRACT #31
CLINICAL RESEARCH
CARDIOVASCULAR DISEASE

A DIAGNOSIS OF SCHIZOPHRENIA IS ASSOCIATED WITH LOWER UTILIZATION OF STENTS AND CORONARY ARTERY BYPASS GRAFTS AMONG PATIENTS WITH ACUTE MYOCARDIAL INFARCTION: A NATIONWIDE ANALYSIS USING THE NATIONAL INPATIENT SAMPLE DATABASE OF 2014

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BACKGROUND/INTRODUCTION: Studies have shown that a diagnosis of schizophrenia is associated with lower utilization of stents and higher mortality among patients with an acute myocardial infarction. We wished to investigate difference in outcomes and utilization of other procedures in a large unselected population of patients presenting with acute myocardial infarction (AMI).

METHODS: We performed a retrospective cohort study, using the 2014 Nationwide Inpatient Sample (NIS) database, which is representative of all nonfederal acute care hospitals nationwide and has been broadly used to estimate the burden of cardiac diseases. We identified adult patients, admitted with AMI and schizophrenia using ICD-9-CM codes. ICD-9-CM codes were also used to identify treatment modalities and events, except for in-hospital mortality, total charges from the length of stay and mean length of stay. We performed univariate analysis of age, sex, race, hospital region, hospital teaching status, insurance type, hospital bed size, Charlson Comorbidity Index and other relevant comorbidities and we included variables with $p < 0.2$ in multivariate logistic regression models for treatment modalities and events. Proportions were compared with weighted Pearson chi square statistic and continuous variables with student t-test. P values were two-sided with 0.5 as threshold for statistical significance.

RESULTS: As compared to patients without schizophrenia, patients with schizophrenia were younger, and more likely to have other comorbidities. Patients with schizophrenia were less aggressively treated with revascularization therapies included, stent implantations (OR= 0.48 (0.49-0.58), $p < 0.001$) early stent implantation (AMI: stent within 24 hours: OR=0.50, 95%CI =0.40-0.61), $p < 0.001$, or coronary artery bypass grafts OR=0.61, 95% CI=0.41-0.91, $p = 0.0017$. Hospital mortality was similar between the two groups. Although the hospital length of stay was longer in patients with schizophrenia (Coef.=0.97, 95% CI=0.34-1.60, $p = 0.003$), total charges were lower (Coef. =-12241\$, 95% CI=19346-5137), presumably due to lower rates of revascularization.

CONCLUSION: Patients with schizophrenia appear to be less aggressively treated. It is possible that the lower rates of revascularization may in part be related to a lower rate of significant coronary artery disease requiring revascularization. Despite the less frequent revascularization, adjusted mortality is similar between the two groups.