



## **QUALITY OF CARE AND OUTCOMES ASSESSMENT**

## PREVALENCE OF VACCINATION IN SYSTOLIC HEART FAILURE: A PROSPECTIVE STUDY OF 549 PATIENTS BY RACE/ETHNICITY AND GENDER.

ACC Poster Contributions Georgia World Congress Center, Hall B5 Tuesday, March 16, 2010, 9:30 a.m.-10:30 a.m.

Session Title: Quality of Care - Disparities

Abstract Category: Quality of Care Presentation Number: 1247-154

Authors: <u>George R. Marzouka</u>, Elyse Julian, Frank B. Cortazar, Andre Dias, Leonardo Tamariz, Kathy Hebert, University of Miami, Miami, FL, Jackson Memorial Hospital, Miami, FL

**Background:** The CDC and ACC have recommended influenza and pneumococcal vaccination in patients with heart failure (HF). Moreover, Healthy People 2010 has aimed at immunizing 60% of high risk adults annually against influenza and once against pneumococcal disease. The aim of our study is to measure the prevalence of vaccination (POV) in patients with systolic HF and identify factors that may influence immunization, such as race/ethnicity and gender.

**Methods:** This is a prospective study of 549 indigent patients enrolled in a systolic HF disease management program (HFDMP) with an ejection fraction (EF) ≤ 40%. Enrollment was from August 2007 to January 2009 at Jackson Memorial Hospital. Patients were interviewed at their initial visit for immunization status; those without vaccinations were then offered the vaccines. The POV for both influenza and pneumococcal disease was calculated at baseline and at follow-up. The odds ratio (OR) of being vaccinated was then calculated using logistic regression for each factor measured.

**Results:** The study population was comprised of mostly Hispanic (56%) and Black (37%) males (70%) with a mean age of 56±12, who presented with a mean EF of 25±10% and dilated cardiomyopathy (59%). The initial POV was 22% at baseline. Within the mean follow up period of 1.9±2.7 months, prevalence improved to 60.5%. Of those not vaccinated at baseline, 17.5% refused vaccination at follow-up. The OR of being vaccinated was 1.3; 95% CI (0.8-2.1) for patients with dilated cardiomyopathy and 1.6; 95% CI (0.8-3.4) for those with chronic pulmonary disease.

**Conclusions:** The initial prevalence of vaccination in HF patients is very low; however, the OR for race/ ethnicity and gender suggest no disparities between these groups at initial presentation. Enrollment into the HFDMP improved immunization prevalence to meet the Healthy People 2010 goals without creating disparities based on race/ethnicity or gender. Refusal rates at follow up suggest that focusing on education may improve vaccination among heart failure patients. Along with improving education, more can be done to improve immunization among heart failure patients.