



LOWER EDUCATIONAL LEVELS MAY BE AN IMPORTANT DETERMINANT OF ADHERENCE TO EVIDENCED-BASED THERAPIES IN POST-MI PATIENTS

Poster Contributions

Poster Hall, Hall C

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Session Title: Predicting Outcomes in Cardiac Rehabilitation Patients

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Background: Socioeconomic status is an important marker for morbidity and mortality outcomes post Myocardial Infarction (MI). Adherence to disease modifying medications and lifestyle changes improve survival post-MI and reduce disease progression. Lower educational levels may lead to lower adherence to evidence-based therapies. In this study, we stratify adherence to medications and exercise rehabilitation regimens in post-MI patients based on educational status and describe the impact of a novel text message reminder system to improve adherence.

Methods: Over a one year period, eighty-four patients post-MI were randomized to usual care versus receiving individualized daily text messages reminding them to text message reminders to their specific medications and prescribed exercise regimens. Log books were used to track to adherence to both medications and exercise. Aerobic fitness and exercise capacity was determined through a standard Bruce Stress test.

Results: There was an absolute 8% lower adherence to medications at 12 months in those with less than 12 years of education (66% versus 74% in those with greater than 12 years of education). Lower education level resulted in a 31% lower adherence to prescribed exercise regimens. Aerobic fitness as measured by treadmill time was lower at one year in those with less than 12 years of education (5.7 minutes on a Bruce protocol stress test compared to 7.1 minutes in more educated individuals). Individualized text message reminders improved adherence to medications and exercise regimens in both groups but especially in those with less education (23% improvement in medication adherence and 372 minutes of extra exercise per month in those with less than 12 years of education versus 17% improvement in medication adherence and 115 minutes of extra exercise per month in those with greater education with text message reminders).

Conclusions: Educational status appears to be an important determinant of adherence to evidence-based therapies post MI. Individualized daily text message reminders may be a potential technological solution to improve this care gap in this population.