

Relationship Between Smoking Status and Walk Distance at The 6 Minute Walk Test in Pilgrims Applicant at The Cardiac Rehabilitation Division of Dr. Saiful Anwar Hospital Malang June 2017

Adriyanto T^{1*}, Hendrawati¹, Kurniawati V¹, Hapsito MT¹, Tjahjono CT¹

¹Residents of Cardiology and Vascular Medicine, Faculty of Medicine Universitas Brawijaya – Dr. Saiful Anwar Hospital, Malang, Indonesia

²Supervisor of Cardiac Preventive and Rehabilitation Division, Department of Cardiology and Vascular Medicine, Faculty of Medicine Universitas Brawijaya – Dr. Saiful Anwar Hospital, Malang, Indonesia

*corresponding author: tonnyadriyantodr@gmail.com

Abstract

Objective: To find out the correlation between smoking status and distance of 6-minute walk test on high-risk pilgrims.

Methods: This study used cross sectional design with 73 pilgrims respondents aged over 60 years who underwent a 6-minute walk test at the cardiac rehabilitation division of Integrated heart service installation at Saiful Anwar General Hospital in June 2017. Pilgrims was instructed to undergo a 6-minute walk test in accordance with the ATS Guidelines. Measurements include the distance of the 6-minute walk test to determine the capacity of the exercise and analyzed its correlation to smoker and non-smoker status. Data analysis using Mann Whitney test.

Results: The total sample was 73, of which 56 (77%) were non-smoker, and 17 (23%) were smoker, with the mean distance of non-smoker and smoker group were 436,8929 +/- 72.75755 meters and 386,0588 +/- 45.44429 meters. The magnitude of the mean difference of 6MWD in both groups was 50.83403 which statistically the difference was considered significant. From result of smoker regression to 6MWD showed that smoker have significant effect to 6MWD with sig value <0,05 that is 0,008.

Conclusion: There was a very significant relationship between smoker and non-smoker status in pilgrims with six-minute walk test. This indicates the need to educate the loss of smoking on pilgrims so it is expected to reduce the mortality and morbidity of pilgrims.