

INTISARI

World Health Organization (WHO) telah melaporkan bahwa *Coronary Artery Disease* (CAD) merupakan salah satu penyebab utama kematian tersering. Derajat stenosis pada pasien CAD sangat penting untuk dinilai dan diketahui karena akan berdampak buruk seperti dapat terjadinya aritmia, gagal jantung dan berbagai komplikasi lainnya bahkan kematian. Penghitungan *Framingham Risk Score* dapat digunakan untuk menghitung faktor risiko yang ada pada individu dan dapat memprediksikan kejadian CAD sehingga dapat dilakukan tindakan upaya pencegahan. Tujuan penelitian ini untuk mengetahui apakah terdapat hubungan *Framingham Risk Score* dengan derajat stenosis berdasarkan signifikan non signifikan angiografi pada pasien CAD.

Metode penelitian observasional desain *cross sectional* dengan menggunakan data sekunder, faktor risiko dihitung dengan *Framingham Risk Score Calculator* kemudian dikelompokkan, risiko tinggi jika score >20, sedang 10-20%, rendah <10, sedangkan derajat stenosis dilihat melalui angiografi dengan dikelompokkan signifikan stenosis jika lumen pembuluh darah menyempit >50% dan non signifikan stenosis jika lumen pembuluh darah menyempit <50%.

Pada FRS kriteria tinggi ditemukan signifikan stenosis sebanyak 88,9% dan nonsignifikan stenosis sebanyak 11,1%. Pada FRS kriteria sedang ditemukan signifikan stenosis sebesar 81,3% dan nonsignifikan stenosis sebesar 18,8%, dan pada FRS kriteria rendah ditemukan signifikan stenosis sebesar 52,6% dan nonsignifikan stenosis sebesar 47,7%. Pada tabulasi silang uji *fisher exact* dengan nilai $p=0,015$ ($p<0,05$).

Berdasarkan uraian diatas maka dapat disimpulkan bahwa terdapat hubungan *Framingham Risk Score* dengan derajat stenosis berdasarkan signifikan dan non signifikan angiografi pada pasien CAD.

Kata Kunci: CAD, FRSC, Angiografi, derajat stenosis, signifikan stenosis, non signifikan stenosis.

Abstract

Introduction : *The World Health Organization (WHO) has reported that Coronary Artery Disease (CAD) is one of the leading cause of the death. Stenosis in CAD patient are associated with such as arrhythmias, heart failure, and other complication even death. The Framingham Risk Score Calculator can be used to predict the risk in CAD. The aim of this study was to investigate the correlation between Framingham Risk Score and stenosis degree based on luminal narrowing using angiography.*

Methods : *This was a cross sectional study and using medical records of 80 CAD patients of Sultan Agung Islamic Hospital between January-December 2016. The risk factors for CAD was measured by using Framingham Risk Score Calculator, the risk factors were divided into various group: high risk (score >20%), moderate risk (10-20%), and low risk (<10%) , while the degree of stenosis observed using angiography divided into significant stenosis group (luminal narrowing >50%) and non significant stenosis group (luminal narrowing <50%).*

Results : *Among high risk of CAD 88.9% had significant stenosis and 11.1% had non significant group, among moderate risk group of CAD 81.3% had significant stenosis and 18.8% had non significant stenosis, among low risk group of CAD 52.6% had significant stenosis and 47.7% had non significant stenosis. There was a correlation between FRS and the degree of stenosis based on luminal narrowing using angiography, cross tabulation with fisher exact test $p=0,015(p<0,05)$.*

Conclusion : *Based on above explanation, it can be conclude that there is a correlation between Framingham Risk Score and the degree of stenosis based on luminal narrowing using angiography in CAD patient.*

Key words: *CAD, FRSC, Angiography, Degree of Stenosis, Significant stenosis, Non significant stenosis.*