

**MAJOR RISK FACTORS OF
CORONARY HEART DISEASE AND PERIPHERAL ARTERY DISEASE
IN SOETOMO HOSPITAL**



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**MAJOR RISK FACTORS OF
CORONARY HEART DISEASE AND PERIPHERAL ARTERY DISEASE
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To fulfill the obligation of Research Methodology Module

Faculty of Medicine Airlangga University

INTERNATIONAL CLASS MEDICAL PROGRAM

FACULTY OF MEDICINE

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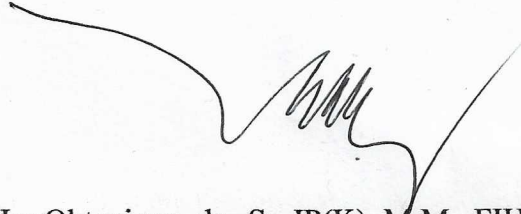
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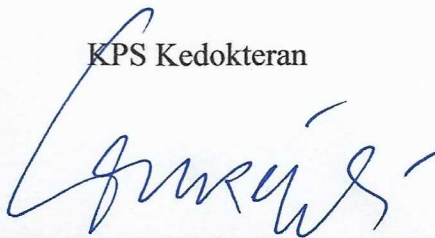
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This paper has been arranged but still far from perfect and needs improvement, therefore the author is open to corrections and suggestions. I hope this paper can provide benefits for medical practice and the development of science.

ABSTRACT

Atherosclerotic diseases have caused many deaths in developed countries and cause one-third of death in people that are older than 35 years old. This disease could cause many cases, such as Coronary Heart Disease (CHD) and Peripheral Artery Disease (PAD). There are several risk factors for these atherosclerotic diseases and this research is determined to find the most common major risk factor that induces atherosclerosis in CHD and PAD inpatients of Soetomo Hospital, so we can prevent and decrease atherosclerotic diseases in the future.

The data that will be collected is the secondary data on the medical record of CHD and PAD inpatients of the Department of Cardiovascular in Airlangga University and Soetomo Hospital in Surabaya during the period of January 2020 – December 2020. The data that will be taken from the medical record will be the age, gender, BMI score, dyslipidemia, diabetes mellitus, hypertension, and smoking history. All independent and dependent variable data (age, gender, BMI score, dyslipidemia, diabetes mellitus, hypertension, and smoking history) is collected and arranged in form of a table. Analyzing data statistically by using SPSS 22.0 program will be performed with *chi-square* test.

Result: According to this research, the most common major risk factor of CHD after data analysis is diabetes mellites (DM) with the prevalence of 56.2% and the most common major risk factor of PAD is patients with age over 40 years old with the prevalence of 33.3%.

From this research, we found out that different atherosclerotic diseases have different risk factors. This study shows that diabetes mellites is the most common major risk factor of CHD and age is the common major risk factor of PAD.

Key Words: Major Risk Factors, Coronary Heart Disease, Peripheral Artery Disease

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LIST OF ABBREVIATIONS

ABI	: Ankle-Brachial Index
ACS	: Acute Coronary Syndrome
AGATHA	: A Global Atherothrombosis Assessment
AHA	: American Heart Association
BMI	: Body Mass Index
CAD	: Coronary Artery Disease
CHD	: Coronary Heart Disease
CRP	: C-Reactive Protein
CT	: Computed Tomography
CVD	: Cardiovascular Disease
DM	: Diabetes Mellitus
ECG	: Electrocardiogram
eNOS	: Isoform Nitric Oxide Synthase
HDL	: High Density Lipoprotein
HPETE	: Hydroperoxyeicosatetraenoic acid
IHD	: Ischemic Heart Disease
LDL	: Low Density Lipoprotein
M-CSF	: Macrophage-Colony Stimulating Factor
MMP-9	: Matrix Metalloproteinase-9
MRI	: Magnetic Resonance Imaging
NF-K β	: Nuclear Factor-KappaB
NO	: Nitric Oxide
PAD	: Peripheral Artery Disease
PET	: Positron Emission Tomography
ROS	: Reactive Oxygen Species
SMC	: Smooth Muscle Cell
SRS	: Sample Registration System
TG	: Triglyceride
VCAM-1	: Vascular Cell Adhesion Molecule