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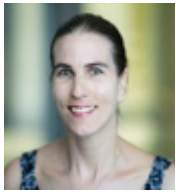


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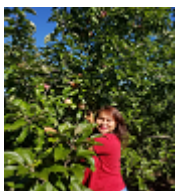


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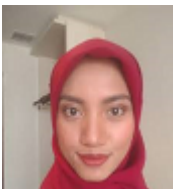
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**THE PROFILE OF CORONARY HEART DISEASE PATIENTS IN DR SOETOMO GENERAL HOSPITAL**Ogiska Chaherfa Nadasya<sup>1</sup>, Johannes Nugroho Eko Putranto<sup>2</sup>, Ketut Sudiana<sup>3</sup>, Agus Subagio<sup>4</sup><sup>1</sup>Medical Study Program, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia<sup>2</sup>Department of Cardiology and Vascular Medicine, Universitas Airlangga, Surabaya, Indonesia<sup>3</sup>Department of Anatomy and Histology, Faculty of Medicine, Airlangga University, Surabaya, Indonesia<sup>4</sup>Department of Cardiology and Vascular Medicine, Universitas Airlangga, Surabaya, Indonesia**ABSTRACT**

**Background:** Coronary heart disease is a deadly disease for human.. The incidence of coronary heart disease is not the same so that this research reported the profile of coronary heart disease patients in Dr Soetomo General Hospital. **Objective:** To analyze the profile of CHD patients in Dr Soetomo General Hospital from February to September 2018. **Material and Method:** A descriptive research based on the medical records **Results:** There are 65 male patients and 20 female patients. There are 58% patients aged 50-60 years old, 24% patients aged more than 60 years old, 18% patients are under 50 years old. The patients' occupations include 42% civil servants, 36% private employees, 9% housewives, 5% retirees, 3% entrepreneurs, 1% for teacher, driver, fisherman, priest, and merchant. The complaint included chest pain (40%), shortness of breath (23.5%), PCI (4.6%), thump chest (1.2%), lower right abdominal pain (1.2%), right leg pain (1.2%), nausea (1.2%), vomiting (1.2%), cough (1.2%), dysentery (1.2%), and no complaint (23.5%). CHD patients in Dr Soetomo General Hospital have the history of hypertension (30.6%), heart disease (22.6%), diabetes mellitus (21.9%), smoking (5.6%), COPD (0.8%), and no history of disease (12.9%). 61% of patients had blood sugar level of  $\geq 100$ mg/dl, 19% patients had blood sugar level of  $< 100$ mg/dl, 20% patients did not have data. **Conclusion:** It found 85 patients, predominantly males of 50-60 years old. The commonest occupation is civil servant and they came with major complaint of chest pain with the history of hypertension and high blood level.

**Keywords:** coronary heart disease, hypertension, chest pain

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### Background

Coronary heart disease or commonly called CHD is one of the deadly diseases for men and women. According to RISKESDAS in Indonesia (Basic Health Research) based on doctor's diagnosis, the prevalence of coronary heart disease in Indonesia in 2013 was 0.5% or estimated to be around 883,447 people. Most of the patients of CHD came from the province of East Java that is 375,127 people or 1.3% from the total patients (Niluh *et al.*, 2016). In North Sulawesi, the incidence of coronary heart disease was 1,892 people or 0.7% of the population (Niluh *et al.*, 2016).

Symptoms commonly seen in patients with coronary heart disease are chest pain when doing strenuous activities, climbing or walking fast. In clinical examination ischemic in patients with coronary heart disease. The pain spreads to the nape of the neck, back and left arm. Some cases of coronary heart disease are nausea, and loss of consciousness (Supriyono, 2008).

The incidence of coronary heart disease is not the same worldwide. Therefore, this research analyzed the patients' characteristics including age, sex, and main complaint of the patients.

### Objective

To analyze the profile of coronary heart disease (CHD) patients who had been hospitalized in Dr. Soetomo in January - September 2018.

### Material and Method

This is a descriptive study of secondary data of patient's medical record in Dr Soetomo General Hospital in February - September 2018. There are 85 patients' data that match the inclusion criteria. Data were grouped according to sex, age, type of work, main complaint, history of disease, and blood sugar level for analysis.

### Results

From 85 patients included in this study, the following result is shown below.

**Table 1. Coronary Heart Disease Patients in Dr Soetomo General Hospital**

Gender	Amount	
	Frequency	Percentage
Men	65	76%
Women	20	24%
Total	85	100%

Based on table 1, there were more male patients than female patients who suffer from coronary heart disease. There were 65 male

patients (76%) and there were 20 female patients (24%).

**Table 2. The Age Group of Coronary Heart Disease Patients in Dr Soetomo General Hospital**

Age	Amount	
	Frequency	Precentage
<50 years old	15	18%
50-60 years old	49	58%
>60 years old	21	24%
Total	85	100%

Based on table 2, the group of patients aged between 50-60 years old is the majority of coronary heart disease patients. Group age of 50-60 years old has 49 people with a

percentage of 58%. The group age of >60 years old has 21 people with a percentage of 24%. Then, age group of <50 years old is as many as 15 people with a percentage of 18%.

**Table 3. Type of Workers of Coronary Heart Disease Patients in Dr Soetomo General Hospital**

Type of Workers	Amount	
	Frequency	Precentage
Public Servants	36	42%
Private Employee	31	36%
Housewife	8	9%
Retired	3	5%
Entrepreneur	2	3%
Teacher	1	1%
Driver	1	1%
Fisherman	1	1%
Priest	1	1%
Merchant	1	1%
Total	85	100%

Based on table 3, coronary heart disease patients came from the group of civil servants as many as 36 people (42%), the group of private employees as many as 31 people (36%), the group of housewives as many as 8 people (9%), the retired group as many as 3

people (5%), entrepreneurial group as many as 2 people (3%), and sequentially there are groups of teachers, drivers, fishermen, priests and traders that each has as many as 1 person (1%).

**Table 4. The Complaints of Coronary Heart Disease Patients in Dr Soetomo General Hospital**

Complaints	Amount	Frequency
Chest Pain	34	40%
Shortness of Breath	20	23,5%
Pro Staging PCI	4	4,6%
Thump Chest	1	1,2%
Lower Right Abdominal Pain	1	1,2%
Right Leg Pain	1	1,2%
Vomitting	1	1,2%
Nausea	1	1,2%
Cough	1	1,2%
Dysentry	1	1,2%
No complaints	20	23,5%
Total	85	100%

Based on table 4, there were 34 patients (40%) complaint about chest pain, 20 people (23.5%) complaint about shourtness of breath, 4 people (4.6%) have PCI intervention, and there are

complaint about thump chest, leg pain, nausea, vomiting, coughing, dysentery each as many as 1 person (1.2%). Finally, there were 20 patients with no complaints (23.5%).

**Table 5. The History of Disease of Coronary Heart Disease Patients in Dr Soetomo General Hospital**

History of Disease	Amount	Frequency
Hypertension	38	30,6%
Heart Disease	28	22,6%
Diabetes Mellitus	26	21,9%
Smoking	7	5,6%
Dislipidemia	4	3,2%
Stroke	3	2,4 %
TB	1	0,8%
COPD	1	0,8%
No History	16	12,9%
Total	124	100%

Based on table 5, coronary heart disease patients in Dr Soetomo General Hospital have a history of hypertension as many as 38 people (30.6%), heart disease as many as 28 people (22.6%), diabetes mellitus as many as 26 people (21.9% ), smoking as many as 7 people

(5.6%), dyslipidemia as many as 4 people (3.2%), stroke as many as 3 people (2.4%), pulmonary TB and COPD as many as 1 person (0.8%). As many as 16 people (12.9%) did not have any history of disease.

**Table 6. The Blood Sugar Levels of Coronary Heart Disease Patients in Dr Soetomo General Hospital**

Blood Sugar Levels	Amount	
	Frequency	Percentage
<100mg/dl	16	19%
≥100 mg/dl	52	61%
No Data	17	20%
Total	85	100%

### Discussion

We found that male patients compared to female patients has ratio of 65:20. This is consistent with research conducted by Jamee *et al* (2013) in the *Gender Difference and Characteristics Attributed to Coronary Artery*

*Disease in Gaza-Palestine*, where the male and female ratio is 120:35. In addition, Zahrawardani *et al* (2012) also did research “Analisis Faktor Risiko Kejadian Penyakit Jantung Koroner di RSUP Dr Kariadi Semarang”. From 128 patients, there were 88

male patients and 40 female patients that were diagnosed coronary heart disease. Research shows that although both sexes are equally susceptible to coronary heart disease, men are at higher risk of coronary heart disease than women due to lifestyle, smoking, and dietary habit.

Coronary heart disease affects most patients in the 50-60 years age group with a percentage of approximately 58%. This is in line with the research of Novriyanti and Usnizar (2014) "Pengaruh Lama Hipertensi Terhadap Penyakit Jantung Koroner di Poliklinik Kardiologi in RSUP Dr. Mohammad Hoesin, Palembang in 2012". From 48 sample, there were 36 people aged 45-64 years that have high risk of coronary heart disease. Moreover, Zainal Abidin (2012) also did similar research "Faktor Risiko Penyakit Jantung Koroner Pada Pasien Rawat Inap in the Cardiovascular Care Unit (CVCU) Cardiac Centre RSUP Dr. Wahidin Sudiro Husodo in Januari – Juli 2008". The incidence of coronary heart disease mostly occurred in the age group of 46 - 65 years (87 cases, 65.9% of total patients).

It was found that most patients are civil servants. This is consistent with the study of Hadi et al (2017) where highest incidence of CHD occurred amongst civil servants. However, our result is in contrast to the study of Salim and Nurrohmah (2013) in "Hubungan Olahraga Dengan Kejadian Penyakit Jantung Koroner di RSUD Dr. Moewardi", where the non-worker group dominated the incidence of coronary heart disease with an incidence of 20 people.

It was found that the commonest main complaint of the patients is a chest pain. This is in line with the research of Novriyanti and Usnizar (2014) on "Pengaruh Lama Hipertensi Terhadap Penyakit Jantung Koroner di Poliklinik Kardiologi RSUP Dr. Mohammad Hoesin Palembang 2012", and study in Tanjung Pura Regional Hospital in 2011-2012 where the patients suffered from the chest pain achieved 77.1% from all cases.

In Syukri's study (2013) from a total sample of 86 coronary heart disease patients, 52 cases had a history of hypertension with a percentage of 55.32% where this is similar to what this research has found.

There were 52 patients who had blood sugar level  $\geq 100$  mg / dl. In the Simanjuntak study (2013), at Tanjung Pura Regional Hospital in 2011-2012, it was concluded that not all

coronary heart disease patients have high sugar levels, although ones who had high blood sugar level predominate the statistics.

### Conclusion

We found 85 patients, predominantly males of 50-60 age group. The commonest occupation of these patients is civil servant and they came with major complaints of chest pain with past history of hypertension and high blood levels.

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