

Chapter 1

Introduction

1.1 Background

Chronic obstructive pulmonary disease (COPD) is a clinical syndrome encompassing a group of chronic, progressive, and debilitating respiratory conditions. COPD is characterized by persistent, progressive airflow limitation, and is often accompanied by cough and increased sputum production. Airflow limitation is associated with chronic inflammation in the lungs and is principally caused by long-term exposure to airborne irritants such as cigarette smoke.

Chronic obstructive pulmonary disease (COPD) is a leading cause of morbidity and mortality in countries of high, middle, and low income. Chronic obstructive pulmonary disease progresses over many decades and tends to present in advanced stages, thus most treated patients are middle aged or elderly. Chronic obstructive pulmonary disease (COPD) continues to be an important cause of morbidity, mortality, and health-care costs worldwide

According to WHO estimates, 80 million people worldwide have moderate to severe COPD. More than 3 million people died of COPD in 2005, which corresponds to 5 % of all adult deaths is the fourth leading cause of death worldwide. The United States National Heart, Lung, and Blood Institute has estimated that is has resulted in a US\$ 32.1 billion loss to the USA economy in direct and indirect costs in 2003, with direct costs totaling US\$18 billion. By 2020, COPD is expected to become the third most common cause of death and it

is the only disease state that is rising in morbidity and mortality amongst the top five killers.

Yet despite the high disease burden and financial costs incurred, efforts to address the problem of chronic respiratory diseases, and COPD in particular, have never received adequate funding in any country, whether for research, prevention, or clinical services. Chronic obstructive pulmonary disease is largely preventable. The main cause in developed countries is exposure to tobacco smoke. It is a global health issue, with cigarette smoking being an important risk factor universally. In developed countries, 85% to 90% of people with COPD have smoked. Indonesia is the country with the 3rd largest number of smokers in the world, after China and India. The prevalence of current smokers aged over 15 years in Indonesia in 2010 reached 34.7 percent. Other preventable causes include exposure to indoor and outdoor air pollution, such as occupational exposure (firefighters, farm workers) and the burning of biomass fuel for cooking and heating which impacts many women in Africa, China, and India.

As the global population ages, the burden of COPD will increase in years to come. Prevalence estimates of the disorder show considerable variability across populations, suggesting that risk factors can affect populations differently. Other advances in our understanding of COPD are increased recognition of the importance of comorbid disease, identification of different COPD phenotypes, and understanding how factors other than lung function affect outcome in our patients.

Table 1.1 Table of COPD Mortality in 1999-2008

Year	Male	Female	TOTAL
1999	60,795	58,729	119,524
2000	58,372	59,510	117,522
2001	58,218	60,526	118,744
2002	59,133	61,422	120,555
2003	59,321	63,062	122,283
2004	57,260	60,911	118,171
2005	61,120	65,929	127,049
2006	57,964	63,006	120,970
2007	59,961	64,516	124,477
2008	65,936	71,757	137,693

Sources: Centers for disease Control and Prevention. National Center for Health Statistic. CDC Wonder On-line Database, compiled from Compressed Mortality File 1999-2008 Series 20 No.20, 2012.

1.2 Prevalence of Chronic Obstructive Pulmonary Disease

Morbidity of patients with COPD in men reach 4% to 6% mortality and morbidity in women 2% to 4% mortality, age over 45 years old (Barnes, 1997). In 1976 found 1.5 million new cases and 1977 deaths due to COPD as many as 45,000, including the cause of death in order to 5 (Tockman MS, 1985) .According to the National Health Interview Survey found 2.5 million people with emphysema. in 1986 in the United States gained 13.4 million people. WHO said the death rate of COPD in 2010 was estimated to rank 3.

1.3 Prevalence of Chronic Obstructive Pulmonary Disease in Indonesia

House hold Health Survey (Survey) department of health RI 1992 found the death rate of emphysema, chronic bronchitis and asthma was ranked 6 out of 10 the most common cause of death in Indonesia (Hadiarto, 1998). Survey COPD patients in 17 health centers eastern Java was found morbidity 13.5%, 13.1% pulmonary emphysema, chronic bronchitis 7,7% and asthma 7.7% (Aji Widjaja, 1993)

1.4 Research Question

What is the characteristics of COPD in Dr.Soetomo Hospital Surabaya 2013-2014?

1.5 Objectives

1.5.1 General Objective

To Describe The Characteristic of COPD Patient at Dr.Soetomo General Hospital Surabaya in 2013-2014.

1.5.2 Specific Objectives

1. To know a Smoking Status COPD Patients
2. To know an Occupation of The Patients
3. To know an Age of The Patients
4. To know a Gender of The Patients
5. To know a Family History of The Patients
6. To know a BMI (Body Mass Index) of The Patients

7. To know a Severity of The COPD (a grade of the diagnosis, a comorbidities of COPD, how many kinds of the drugs)

1.6 Benefits

To get detail information about COPD Patients in Dr.Soetomo Hospital Surabaya year 2013-2014