



Study of chronic Obstructive Pulmonary Disease Patients in Damietta Chest Hospital

Thesis

*Submitted for Partial Fulfillment of Master Degree
in Chest Diseases & Tuberculosis*

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2018**

Acknowledgment

*First of all, the great thanks to **Allah** who enabled us to complete this work hoping to provide a useful guide in studying of chronic Obstructive Pulmonary Disease Patients in Damietta Chest Hospital.*

*I would like to express my deep gratitude and appreciation to **Prof. Dr. Mohamed Sherif El Bohy**, Professor of Chest Diseases, Faculty of Medicine, Ain Shams University, for his kind supervision and support, without his continuous guidance and encouragement this thesis would have never seen light.*

*A special measure of appreciation is extended for **Dr. Hossam Eldin Mohamed Abdel Hamid**, Lecturer of Chest Diseases, Faculty of Medicine, Ain Shams University. He offered me the utmost care, invaluable advice and unlimited support.*

*Lastly, to **my Parents, my Wife and my Sons (Eyad, Mazen)** who are all my life.*

Ahmed Mohamed Roshdy Ghanem

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا

إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

اللَّهُ
صَدِّقُ
الْعَظِيمِ

سورة البقرة (٣٢)

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List of Abbreviations

6MWT6 minute walking test
AAT α 1-antitrypsin
ABGArterial blood gas
ATS	.....American Thoracic Society
BIPAP	.....Bi-level positive airways pressure
BLVR	.....Bronchoscopic lung volume reduction
BMI	.....Body mass index (kg/m ²)
BTS	.....British Thoracic Society
CCF	.....Congestive cardiac failure
CO₂	.....Carbon dioxide
COPD	.....Chronic obstructive pulmonary disease
CPAP	.....Continuous positive airway pressure
CT	.....Computed tomography
CVD	.....Cardiovascular disease
CXR	.....Chest radiograph
DPI	.....Dry powder inhaler
DVT	.....Deep vein thrombosis
ERS	.....European Respiratory Society
FEV₁	.....Forced expiratory volume in 1s
FVC	.....Forced vital capacity
GP	.....General practitioner
HR	.....Heart rate
ICU	.....Intensive care unit

IPAHIdiopathic pulmonary arterial hypertension
IVIntravenous
K+Potassium ion
KgKilogram
LABALong-acting B2 agonist
LTOTLong-term oxygen therapy
LVLeft ventricle/ventricular
LVFLeft ventricular failure
LVRSLung volume reduction surgery
MDIMetered dose inhaler
MIMyocardial infarction
MRCMedical Research Council
MRIMagnetic resonance imaging
NICENational Institute for Health and Care Excellence
NIMVNon-invasive mechanical ventilation
NIPPVNon-invasive positive pressure ventilation
NIVNon-invasive ventilation
NONitric oxide
NO2Nitrogen dioxide
NRTNicotine replacement therapy
O2Oxygen
PACO2Arterial carbon dioxide tension
PAHPulmonary arterial hypertension
Pao2Arterial oxygen tension
PAPPulmonary artery pressure

PCO₂Carbon dioxide tension
PEPulmonary embolus
PEFPeak expiratory flow
PEFRPeak expiratory flow rate
PFTPulmonary function test
PHTPulmonary hypertension
PO₂Oxygen tension
PRPulmonary rehabilitation
RCTRandomized controlled trial
RRRespiratory rate
RVHRight ventricular hypertrophy
SaO₂Arterial oxygen saturation (usually a percentage)
SESide effect
SOBShortness of breath
TLCTotal lung capacity
TLCOTotal lung carbon monoxide transfer factor
UKUnited Kingdom
USUltrasound
USAUnited States of America
V/QVentilation-perfusion ratio
VCVital capacity
VsVersus
WHOWorld Health Organization

INTRODUCTION

Chronic obstructive pulmonary disease (COPD) is a common, preventable and treatable disease that is characterized by persistent respiratory symptoms and airflow limitation that is due to airway and/or alveolar abnormalities usually caused by significant exposure to noxious particles or gases (**Global initiative für chronic obstructive lung disease, 2017**).

According to the latest WHO estimates, at present 64 million people have COPD and 3 million people died of COPD. WHO predicts that COPD will become the third leading cause of death worldwide by 2030 (**WHO, 2017**).

Chronic obstructive pulmonary disease (COPD) is an important cause of morbidity and mortality in both high- and low-income countries. While active cigarette smoking is the most important preventable risk factor internationally, outdoor and indoor air pollutants can cause or exacerbate COPD (**Liu et al., 2008**).

Comorbid diseases potentiate the morbidity of COPD, leading to increased hospitalizations, mortality and healthcare cost. Comorbidities complicate the management of COPD and need to be evaluated carefully (**Khan et al., 2014**).

Introduction

COPD prevalence, morbidity, and mortality vary across countries and across different groups within the same country. In Egypt, COPD is a rising significant health problem; however, information on its prevalence, morbidity, and mortality is still lacking (**Said et al., 2015**).