Study of chronic Obstructive Pulmonary Disease Patients in Damietta Chest Hospital

Thesis

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in Chest Diseases & Tuberculosis

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Ahmed Mohamed Roshdy Ghanem


بسم الله الرحمن الرحيم
قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا
إِنَّكَ أَنتَ الْعَلِيمُ الْحَكِيمُ
صدق الله العظيم
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List of Abbreviations

6MWT ..... 6 minute walking test

AAT..... α1-antitrypsin

ABG ..... Arterial blood gas

ATS ..... American Thoracic Society

BIPAP ..... Bi-level positive airways pressure

BLVR ..... Bronchoscopic lung volume reduction

BMI ..... Body mass index (kg/m2)

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

IPAH ..... Idiopathic pulmonary arterial hypertension

IV ..... Intravenous

K+ ..... Potassium ion

Kg ..... Kilogram

LABA ..... Long-acting B2 agonist

LTOT ..... Long-term oxygen therapy

LV ..... Left ventricle/ventricular

LVF ..... Left ventricular failure

LVRS ..... Lung volume reduction surgery

MDI ..... Metered dose inhaler

MI ..... Myocardial infarction

MRC ..... Medical Research Council

MRI ..... Magnetic resonance imaging

NICE ..... National Institute for Health and Care Excellence

NIMV ..... Non-invasive mechanical ventilation

NIPPV ..... Non-invasive positive pressure ventilation

NIV ..... Non-invasive ventilation

NO ..... Nitric oxide

NO2 ..... Nitrogen dioxide

NRT ..... Nicotine replacement therapy

O2 ..... Oxygen

PACO2 .... Arterial carbon dioxide tension

PAH ..... Pulmonary arterial hypertension

Pao2 ..... Arterial oxygen tension

PAP ..... Pulmonary artery pressure

PCO2 ..... Carbon dioxide tension

PE ..... Pulmonary embolus

PEF ..... Peak expiratory flow

PEFR ..... Peak expiratory flow rate

PFT ..... Pulmonary function test

PHT ..... Pulmonary hypertension

PO2 ..... Oxygen tension

PR ..... Pulmonary rehabilitation

RCT ..... Randomized controlled trial

RR ..... Respiratory rate

RVH ..... Right ventricular hypertrophy

SaO2 ..... Arterial oxygen saturation (usually a percentage)

SE ..... Side effect

SOB ..... Shortness of breath

TLC ..... Total lung capacity

TLCO ..... Total lung carbon monoxide transfer factor

UK ..... United Kingdom

US ..... Ultrasound

USA ..... United States of America

V/Q ..... Ventilation-perfusion ratio

VC ..... Vital capacity

Vs ..... Versus

WHO ..... World 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)**.

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)**.