# بسم الله الرحمن الرحيم


MONA MAGHRABY


# شبكة المعلومات الجامعية

# التوثيق الالكتروني والميكروفيلم

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التوثيق الإلكتروني والميكروفيلم

# جامعة عين شمس

# التوثيق الإلكتروني والميكروفيلم

# قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

# يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

***MONA MAGHRABY***

# Study of Addiction in COPD patients in Abbasiya Chest Hospital

*Thesis*

Submitted for Partial Fulfillment of M.D. Degree
**In Chest Diseases & TB**

*By*

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2021

# Acknowledgement

My greatest gratitude to **ALLAH** whose guidance and support were the main motive behind accomplishing this work.

I would like to express my profound gratitude and sincere appreciation to **Prof. Dr. Adel Mohamad Saeed,** Professor of Chest Diseases, Faculty of Medicine, Ain Shams University, for his great help and support and gentle guidance and insistence. Without his help, this work would have never been accomplished.

I would also like to express my appreciation to **Dr. Riham M. Hazem M.Raafat,** Lecturer of Chest Diseases, Faculty of Medicine, Ain Shams University, for her continuous help, guidance and encouragement.

Last but not least I would like to express my deep thanks and gratitude to all family members for supporting me and pushing me forward all the time.

*Mahmoud M. Muneer*

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# List of Abbreviations

| | |
|---|---|
| **A5nAChR** | Alpha 5 Subunit Nicotinic Acetyl Choline Receptors |
| **Ach** | Acetyl Choline |
| **AOD** | Alcohol and Other Drug |
| **AODUD** | Describe Alcohol and Other Drug use Disorder |
| **B3AChR** | Beta 3 Subunit |
| **BOLD** | Burden of Obstructive Lung Disease |
| **CFTR** | Cystic Fibrosis Transmembrane Conductance Regulator |
| **ChAT** | Choline Acetyl Transferase |
| **CHRNA5** | Cholinergic Receptor Nicotenic Alpha 5 Subunit |
| **CHRNB4** | Cholinergic Receptor Nicotenic Beta 4 Subuit |
| **COPD** | Chronic Obstructive Pulmonary Disease |
| **DA** | Dopamine |
| **DALY** | Disability-Adjusted Life Year |
| **DNA** | De-oxy Ribo Nucleic Acid |
| **Dsm** | Diagnostic and Statistical Manual of Mental Disorders |
| **Fev1** | Forced Expiratory Volume at the 1st Second |
| **fMRI** | Functional Magnetic Resonance Imaging |
| **FTND** | Fagerstrom Test for Nicotine Dependence |
| **Fvc** | Forced Vital Capacity |
| **GBD** | Global Burden disease |

# List of Abbreviations

| | |
|---|---|
| **GWA** | Genome Wide Association |
| **Laba** | long Acting Beta Agonist |
| **LAMA** | Long Acting Muscarinic Agonist |
| **mAchR** | Muscarininc Acetyl Choline Receptors |
| **NAChR** | N-Acetyl Choline Receptors |
| **Nsclc** | Non Small Cell Lung Cancer |
| **PFC** | Pre Frontal cortex |
| **Qol** | Quality Of Life |
| **Saba** | Short Acting Beta Agonist |
| **SABR** | Stereotactic Ablative Radiation Therapy |
| **SBRT** | Stereotactic Body Radiation Therapy |
| **SUD** | Substance Use Disorder |
| **VTA** | Ventral Tegmental Area |

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# INTRODUCTION

The World Health Organization and the American Psychiatric Association use the term "substance dependence" rather than "drug addiction ***(American Psycatric Association 2000).***

Drug addiction is a chronic, relapsing disorder in which compulsive drug-seeking and drug-taking behavior persists despite serious negative consequences ***(Maddux and Desmond, 2000).***

Addictive substances induce pleasant states (euphoria in the initiation phase) or relieve distress. Continued use induces adaptive changes in the central nervous system that lead to tolerance, physical dependence, sensitization, craving, and relapse ***(Cami and Farré, 2003).***

Substance abuse is characterized by recurrent and clinically significant adverse consequences related to the repeated use of substances, such as failing to fulfill major role obligations, use of drugs in situations in which it is physically hazardous, occurrence of substance-related legal problems, and continued drug use despite the presence of persistent or recurrent social or interpersonal problems ***(Cami and Farré, 2003).***

Tolerance and physical dependence reflect physiological adaptation to the effects of a drug, whereas the remaining criteria define uncontrollable drug consumption. However, tolerance and physical dependence

are neither necessary nor sufficient for a diagnosis of substance dependence. Substance abuse or harmful use, a less severe disorder, may result in dependence ***(World Health Organization, 1992).***

Smokers with COPD are at high risk for poor health outcomes directly attributable to tobacco related conditions, including progression of lung disease and cardiovascular diseases ***(Mullerova et al., 2013).***

Cannabis, commonly known as marijuana, is the most widely used illegal drug in the world. After tobacco, it is the second most widely smoked substance in the general population ***(World Drug Report, 2006).***

The majority of people in both developed and developing countries who currently smoke tobacco and have also smoked marijuana ***(Timberlake et al., 2007).***

The potential impact on lung health of marijuana smoke, with its wide range of toxins, is poorly understood ***(Tetrault et al., 2007).***

Short-term heavy marijuana smoking among young adults can worsen lung function ***(Tashkin et al 1987).***

Long term marijuana smoking has been linked to an increase in respiratory symptoms ***(Simmons et al., 1997).***

# Aim of the Work

The primary objective of this study is detection of different addiction patterns in COPD patients admitted in Abbasia Chest Hospital, and secondary objective is evaluation of the effect of substance abuse in disease course.