

# **Pattern of Tobacco Smoking in Substance Use Disorder Male Patients**

Submitted for partial fulfillment of Master's Degree  
in Neuropsychiatry

By

**Rana Zakaria Ahmed**

*M.B.,B.Ch., Ain Shams University*

Under Supervision of

**Prof. Amany Haroun El-Rasheed**

Professor of Psychiatry

Faculty of Medicine, Ain Shams University

**Prof. Nivert Zaki Hashem**

Professor of Psychiatry

Faculty of Medicine, Ain Shams University

**Dr. Mahmoud Mamdouh El-Habiby**

Assistant professor of

Faculty of Medicine, Ain Shams University

**Faculty of Medicine**

**Ain Shams University**

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*Dedication*

*Dedicated to those who inspired me  
throughout my whole life  
to my family*

*& to my Husband Adel for his endless  
patience and support*



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**List of Abbreviations**

SUD	Substance use disorders
VTa	VENTRAL TEGMENTAL AREA
GABA	Gamma aminobutyric acid
SNPs	Single nucleotide polymorphisms
ALDH2	Aldehyde dehydrogenase
DRD2	Dopamine receptor 2
NACC	Nucleus accumbense
CBT	Cognitive–Behavioral therapy
NRT	NICOTINE REPLACEMENT THERAPY
nAChR	Nicotinic acetylcholine receptor
SCID-I	STRUCTURED CLINICAL INTERVIEW FOR DSM-IV
FTND	Fagerström Test for Nicotine Dependence
SCQ-A	Smoking consequences questionnaire –Adult
WISDM-68	Wisconsin inventory of smoking dependence motives
RFQ	Reason for quitting scale
LWDS-11	Lebanon Water-pipe Dependence Scale-11
RFQ-INS	Reason for Quitting-Intrinsic, Self-Control
RFQ-INH	Reason for Quitting-Intrinsic, Health-concern

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## List of Abbreviations

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RFQ- EXI	Reason for Quitting-Extrinsic, Immediate Reinforcement
RFQ- EXS	Reason for Quitting-Extrinsic, social pressure
RFQ/I-E	Level of Intrinsic-Extrinsic motivation



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## Introduction

Smoking is considered as a major risk factor for several major diseases. The World Health Organization (WHO) estimated that tobacco caused one in ten deaths in adults worldwide, corresponding to a total of five million people per year. It has been estimated that the tobacco epidemic may kill one in six adults corresponding to 10 million people annually in the next 20-30 years, with 70-80% of these deaths occurring in developing countries (*WHO, 2008*).

The majority of patients enrolled in treatment for substance use disorders (SUDs) also use tobacco with reported rates ranges from 80% (*Breland et al., 2014*) to 97% , which is significantly higher than the smoking rate in the general population (*Guydish et al., 2011; Pajusco et al., 2012*). Such concurrent smoking is responsible for substantial medical problems and is arguably the largest contributor to mortality among substance-dependent patients. Moreover, it is associated with greater levels of substance abuse (*Tonneatto et al., 1995*).

Attempts to explain the relationship between nicotine and the use of other substances have involved conceptual models including, biological vulnerabilities due to nicotine during adolescents (*Kelley & Rowan, 2004*), common