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RESPIRATORY COMPLICATION OF ADDICTION AMONG PATIENTS AT TANTA CHEST HOSPITAL

A Thesis

Submitted for the partial fulfillment of Master Degree

In

Chest Diseases

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LIST OF ABBREVIATIONS

ABG:	Arterial blood gases.
AIDS:	Acquired immune deficiency syndrome.
BAL:	Bronco –Alveolar lavage.
BOOP:	Bronchiolitis obliterans organizing pneumonia.
BUN:	Blood urea nitrogen.
CAP:	Community acquired pneumonia.
CMV:	Cytomegalovirus.
CNS:	Central nervous system.
CNS:	Central nervous system.
COPD:	Chronic obstructive pulmonary disease.
CT:	Computed tomography.
CVA:	Cerebral vascular accident.
CVS:	Cardiovascular system.
CXR:	Chest x- ray.
DM:	Diabetes mellitus.
DOTS:	Direct observed thereby short course**.**
DSM:	(Diagnostic and Statistical Manual of Mental Disorders)
DSM-IV-TR:	(Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision).
ECG:	Electrocardiogram.
EPS:	Extraprymidal side effects
ESR:	Erythrocyte sedimentation rate.
GHB:	γ-Hydroxybutyric acid (γ Gamma)
GI Complication:	Gasatro intestinal complicatin.
GOLD:	Global initiative for chronic obstructive lung Disease
HCV:	Hepatitis C virus
HIV:	Human immune deficiency virus.
HAP:	Hospital acquired pneumonia
ICH:	Intra cranial hemorrhage.
ICU:	Intensive care unit.
IL:	Interleukin.
I S:	Ischemic stroke.
IV:	Intravenous.
Lab:	Laboratories
LSD:	Lysergic acid diethylamide
MDMA:	3.4methylenedioxyamphetamine
MDR:	Multi drug resistance.
MV:	Mechanical ventilation.
NE:	Nor epinephrine
NIDA:	National Institute Drug Abuse.
NTSS:	National Tuberculosis Surveillance System**.**
PCP:	Phencyclidine.
PE:	Pulmonary embolism.

PFT:	Pulmonary function test.
PRES:	Posterior Reversible Encephalopathy Syndrome
STDs:	Sexual transmitted diseases.
T.B:	Tuberculosis.
THC:	Tetrahydrocannabinol.
TIAs:	Transient ischemic attacks..
TLC:	Total leuckocytic count.
US:	Ultrasound.
UNDCP:	The United Nations International Drug Control Programmes.
WHO:	World health organization.
ZN stain:	Ziehl Nielsen stain

INTRODUCTION

INTRODUCTION

Illicit drug use represents a worldwide health problem, involving about 5% of the world's adult population and contributing to crime, misery, insecurity and the spread of human immunodeficiency virus (HIV)(***Bruno Mégarbane and Lucie Chevillard.,2013)***

Many expensive and disturbing social problems can be traced directly to drug dependence. Recent studies estimated that drug dependence costs the United States approximately $67 billion annually in crime, lost work productivity, and other social problems. These expensive effects of drugs on all social systems have been important in shaping the public view that drug dependence is primarily a social problem that requires interdiction and law enforcement rather than a health problem that requires prevention and treatment. ***(A.Thomas.MCLellan et al., 2009)***

Every year, the abuse of illicit drugs and alcohol contributes to the death of more than 100,000Americans, while tobacco is linked to an estimated 440,000 deaths per year. The Diagnostic and Statistical Manual of Mental Disorders (DSM) is a diagnostic manual used by clinicians that contains descriptions and symptoms of all mental disorders classified by the American Psychiatric Association. ***(A.Thomas.MCLellan et al., 2009)***

The DSM uses the term "substance use disorders" to characterize illnesses associated with drug use. There are two broad categories: substance abuse and substance dependence. Both are associated with a maladaptive pattern of substance use that leads to clinically significant impairment. Drug abuse includes such symptoms as:

- Failure to fulfill major role obligations .
- Legal problems.

- Use in situations that are physically hazardous; and
- Continues use despite persistent social or interpersonal problems.

The term dependence includes such symptoms as:

- Drug taking in larger amounts than intended
- Inability to cut down on drug use
- A great deal of time spent in activities necessary to obtain the drug; and
- Continuous uses despite knowledge of health or social problems caused by the drug Dependence may or may not include “physical dependence,” defined by withdrawal symptoms when drug use is abruptly ceased, and “tolerance,” the need for more drug to achieve a desired effect. The DSM term “dependence” is what NIDA refers to as “addiction,” ***(NIDA., 2012)***

There has been a sizeable increase in the production and use of illicit drugs throughout the world. The United Nations International Drug Control Programmes (UNDCP) estimate that the global production of coca leaf has more than doubled and that of opium poppies more than tripled since 1985 ***.(UNDCP., 1997)***

Moreover, new forms of existing drugs, (e.g. smokeable "crack" cocaine), changes in the modes of administering these drugs (e.g. transitions from opium smoking to heroin injection in South East Asia) and the introduction and proliferation of new synthetic drugs (e.g. MDMA "ecstasy", other amphetamine-type stimulants and so called designer drugs ***(WHO., 1997***),

All create new or exacerbate existing substance related problems. Of particular importance is the fact that drug injection has become a major transmission route for HIV ***(Stimson et al., 1998).***

There are many illnesses in which voluntary choice affects initiation and maintenance, especially when these voluntary behaviors interact with genetic and cultural factors. ***(A.Thomas.MCLellan et al., 2009)***

For example, among males, salt sensitivity is a genetically transmitted risk factor for the eventual development of one form of hypertension. However, not all of those who inherit salt sensitivity develop hypertension. This is because the use of salt is determined by familial salt use patterns and individual choice. Similarly, risk factors such as obesity, stress level, and inactivity are products of familial, cultural, and personal choice factors. Thus, even among those with demonstrated genetic risk, a significant part of the total risk for developing hypertension can be traced to individual behaviors. There are also involuntary components embedded within seemingly volitional choices. ***(A.Thomas.MCLellan et al., 2009)***

Drug addiction leads to many health problems involving skin and superficial structures, musculoskeletal system, cardiovascular system, septicemia and disseminated infections, hepatitis viruses, renal complications, neuropsy-chiatric complications, HIV and pulmonary complication ***(Crane et al., 1986)***.

Commonly, abused drugs that may play a role in causing thoracic disease include cocaine, opiates, and methamphetamine derivatives. Intravenously abused and oral medications may contain filler agents that may be responsible for disease. Thoracic complications may be categorized as pulmonary, pleural, mediastinal, cardiovascular, and chest wall complications. Pulmonary complications of drug abuse include pneumonia, cardiogenic edema, acute lung injury, pulmonary hemorrhage, and aspiration pneumonia. Filler agents such as talc may result in panacinar emphysema or high-attenuation upper-lobe conglomerate masses. The

primary pleural complication of illicit drug use is pneumothorax ***(Hagan and Burney., 2007)***.