

Ain Shams University Faculty of Medicine Neuropsychiatry Dept.

## "Systematic Review on Egyptian Psychiatric Studies on Substance Abuse Disorders"

Submitted for partial fulfillment of Master Degree in Neuropsychiatry

By:

Mohamed Khaled Ahmed M.B., B. Ch. (December 2002)

Supervisors:

## Prof. Naglaa El Mahallawy

Professor of Neuropsychiatry
Faculty of Medicine - Ain Shams University

#### Assist. Prof. Gihan El Nahhas

Assist. Prof. of Neuropsychiatry
Faculty of Medicine - Ain Shams University

Dr. Hesham Sadek
Lecturer of Neuropsychiatry
Faculty of Medicine - Ain Shams University

2006

بِنَ الْمُؤَالِّمُ الْمُؤَالِّوْمِنَ الْمُؤَالِّوْمِنَ الْمُؤَالِّوْمِنَ الْمُؤَالِّوْمِنَ الْمُؤَالِّوْمِنَ الْمُؤْمِنِ اللّهِ الْمُؤْمِنِ اللّهُ مِنْ الْمُؤْمِنِ الْمُؤْمِنِ الْمُؤْمِنِ اللْمُؤْمِنِ الْمُؤْمِنِ الْمُؤْمِ الْمُؤْمِنِ الْمُؤْمِ الْمُؤْمِنِ الْمُؤْمِلِي الْمُؤْمِنِ الْمُؤْمِلِ الْمُؤْمِلِي الْمُؤْمِ الْ

صدقالله العظيم

Table of contents	Page
Acknowledgment Introduction Aim of this work Methodology (procedures) Chapter one: List of the available Egyptian psychiatric researches done on substance abuse disorders" Chapter two: Reviewing Egyptian psychiatric researches done on substance abuse disorders"	6-7 8-13 14-15 16-17 18-32  33-99  34-49 49-60 61-80 80-87 87-93 94-99 100-118  119-133 134-135 136-140 141-155 156-163 V-1

List of tables and figures	Page
Table 1: List of the available Egyptian psychiatric researches done on substance abuse disorders"  Table 2: Prevalence of substance exposure  Table 3: Differential of used/abused psychoactive substances among Egyptian users/abusers  Table 4: Age of initiation of use/abuse psychoactive substances  Table 5: Gender distribution  Table 6: Parent absence  Table 7: Bad relationship with the parents  Table 8: Family history of substance use  Table 9: Peer risk  Table 10: Axis I comorbidity in substance use disorders  Table 11: Axis II comorbidity in substance use disorders  Table 12: Prevalence of suicidality in substance use use disorders	19-32 37 40 42 44 52 53 55 56 72 79 84
Figure 1: Etiological psychopharmacological factors controlling substance seeking behavior	50

### List of abbreviations

**APA**= American Psychiatric Association

**ASI**= Addiction Severity Index

**BAD**= Bipolar Affective Disorder

**BDI**= Beck Depression Inventory

**CIDI**= Composite International Diagnostic Interview

**DAS**= Dysfunctional Attitude Scale

**DSM-III**= Diagnostic & Statistical Manual of mental disorders-III

**DSM-III-R**= Diagnostic Statistical Manual of mental disorders - III-Revised

**DSM-IV**= Diagnostic Statistical Manual of mental disorders –IV

**ECT**=Electro Convulsive Therapy

**EPQ**= Eysenck Personality Questionnaire

GAD= Generalized Anxiety Disorder

GHQ= General health questionnaire

**HAS**= Hamilton Anxiety Scale

**HDS**= Hamilton Depression Scale

LLQ= Linton Langs Questionnaire

**LNNB**= Luria-Nebraska Neuropsychological Battery

LSD=Lysergic acid diethylamide

**MDD**= Major Depressive Disorder

**MedSPAD**= Mediterranean School Project on Alcohol and other Drugs

MINI= Mini International Neuropsychiatric Interview

MMPI= Minnesota Multiphasic Personality Inventory

**NOS**= Not Otherwise Specified

**NRT**= Nicotine Replacement Therapy

**OCD**= Obsessive Compulsive Disorder **PANNS**= Positive and Negative Syndrome Scale **PAS**= Personality Assessment Schedule **PD**= Personality Disorder **PTSD**= Post-Traumatic Stress Disorder **ROS**= Religious Orientation Scale **SCID**= Structured Clinical Interview for DSM **SDMT**= Symbol Digit Modalities Test **SIS**= Suicide Ideation Scale **SPS**= Suicidal Probability Scale **SRRS**= Social Readjustment Rating Scale **SYMLOG=** System Multiple Level Observation Of Groups **TMS**= Trans-cranial Magnetic Stimulation **TPQ**= Tri-dimensional Personality Questionnaire

# Acknowledgment

## **Acknowledgment**

No words will be sufficient to describe my faithful gratitude to my Professor Naglaa El-Mahallawy for her continuous support, wise helpful guidance and patience.

Special thanks to Assistant Professor Gihan El Nahhas who had generously helped me and supported me a lot in doing this work.

Also, I would like to thank Dr Hesham Sadek for his warm encouragement and kind support.

I should thank Irofessor Afaf Hamed for her wise choice of the subject of the study and all her efforts to provide the chance to finish this work in a good way. Also I can't forget Irofessor Adel Sadek who was the first one started this project, may GOD bless his soul.

I would like to express my deep thanks to Assistant Professor Hisham Ramy for his valuable advice and guidance.

Also, I should thank Professor Sahar Sabbour and Dr Naglaa Arafa (department of community, environmental & occupational medicine) who had generously helped me in conducting this work in a better way.

Finally I would like to thank all researchers who work in field of substance abuse without them I couldn't finish my work.

# Introduction

#### "Introduction"

Substances influencing mood and thinking processes have been known to humanity at least from early, pre-pottery Neolithic times, i.e. 8000 B.C. and there was no culture in which no substance of this type was known and used. The attitude of society and pattern of use of psychoactive substances have changed with the time particularly in the last decade the substance abuse approaches the level of global epidemics. **Vetulani**, (2001) <sup>a</sup>

Addiction is a chronic, recurrent disease, characterized by absolute dominance of drug-seeking behavior. The craving induced by substances of addiction inhabits other behavior; the adaptation of an organism to chronic intake of drugs involves development of adaptive changes, sensitization or tolerance. **Vetulani**, (2001) <sup>b</sup>

In Egypt, estimates of magnitude of substance addiction and the changing pattern of substance availability showed that the most commonly used drugs in the 1980s where cannabis, opium, solid and liquid hypnosedatives, heroin and finally cocaine, in descending order of frequency. Experts are rightly inclined to consider the estimate that drug seizures represents a fifth of drug use in society as more plausible. Using this formula, one can safely estimate the rate of 'experimentation' with drugs in this group to be about 10-12% in the age group 15-25 years; the rate for drug 'misuse' would be 2.5-3%, whereas those identified as drug 'addicts' would constitute less than 1% of the population (65 million in 1998). Such estimates are alarming and are a warning to policy makers and service providers. **Okasha**, (2004) b

Substance use disorders are associated with a significant increase in morbidity and mortality, particularly among men. Each year non-nicotine substance dependence is, directly or indirectly, responsible for at least 40% of all hospital admissions and approximately 100,000 deaths per year result directly from the use of illicit drugs. **American Psychiatric Association**, (2006)

The majority of patients treated for substance dependence (up to 70% in some studies) are eventually able to stop compulsive use and either abstain from abused substances entirely or experience only brief episodes of substance use that don't progress to abuse or dependence: only minority of patients (15-20%) exhibit a pattern of chronic relapse (i.e., over 10-20 years) requiring repetitive intervention. **American Psychiatric Association**, (2006)

The recent changes in the attitude of the society to this problem resulted in regarding the addiction as a serious social plague. Therefore, the discovery of biological bases of the need to use psychoactive substances is of crucial importance. **Vetulani**, (2001) <sup>b</sup>

The present scene in Egypt is characterized by an unprecedented shift towards "demand reduction" at the primary prevention level, hand in hand with efforts to provide services at both secondary and tertiary health care levels. Supply control mechanisms are duly and seriously implemented. Al Akabawi, (2001)

#### Rationale of the study:

As substance abuse disorders constitutes a major public health problem, throughout the years many Egyptian studies were done to address this important topic. So, it's prudent to review this studies with the intent of finding their results and critically appraising the findings, this will enable us to know where Egyptian studies on substance abuse disorders stand and what needed to be done further.

#### What is systematic review?

#### **Introduction:**

Systematic reviews are scientific investigations in themselves, with pre-planned methods and an assembly of original studies as their "subjects." They synthesize the results of multiple primary investigations by using strategies that limit bias and random error. When the results of primary studies are summarized but not statistically combined, the review may be called a qualitative systematic review. A quantitative systematic review, or meta-analysis, is a systematic review that uses statistical methods to combine the results of two or more studies. The term "overview" is sometimes used to denote a systematic review, whether quantitative or qualitative. Summaries of research that lack explicit descriptions of systematic methods are often called narrative reviews. Cook et al (1997)

#### **Methodology for a systematic review:**

1-State objectives of the review and outline eligibility criteria. 2- Search for studies that seem to meet eligibility criteria. 3- Tabulate characteristics of each study identified and assess its methodological quality. 4- Apply eligibility criteria, and justify any exclusion. 5- Assemble the most complete dataset feasible, with assistance from investigators, if possible. 6- Analyze results of eligible studies, using statistical synthesis of data (meta-analysis) if appropriate and possible. 7- Compare alternative analyses if appropriate and possible. 8- Prepare a

critical summary of the review, stating aims, describing materials and methods, and reporting. **Greenhalgh**, (1997)

#### **Advantages of systematic reviews:**

1- Explicit methods limit bias in identifying and rejecting studies. 2- Conclusions are more reliable and accurate because of methods used. 3- Large amounts of information can be assimilated quickly by healthcare providers, researchers, and policymakers. 4- Delay between research discoveries and implementation of effective diagnostic and therapeutic strategies may be reduced. 5- Results of different studies can be formally compared to establish generalisability of findings and consistency (lack of heterogeneity) of results. 6- Reasons for heterogeneity (inconsistency in results across studies) can be identified and new hypotheses generated about particular subgroups. 7- Quantitative systematic reviews (meta-analyses) increase the precision of the overall. Greenhalgh, (1997)

# Evaluating systematic reviews: (not all questions are applicable to all systematic reviews): Oxman et al (1994)

- -Does this review address a clear question?
  - 1- Did the review address a clearly focused issue?
  - 2- Did the author look for the appropriate sort of papers?
- -Are the results of this review valid?
  - 1- Did you think the important, relevant studies were included?
  - 2- Did the review's author do enough to assess quality of the included studies?
  - 3- If the results of the review have been combined, was it reasonable to do so?
- -What are the results?
  - 1- What is the overall result of the review?
  - 2- How precise are the results?
- -Will the results help locally?

- 1- Can results be applied to the local population?
- 2- Were all important outcome considered?
- 3- Are the benefits worth the harms & costs?

# Aim of this work