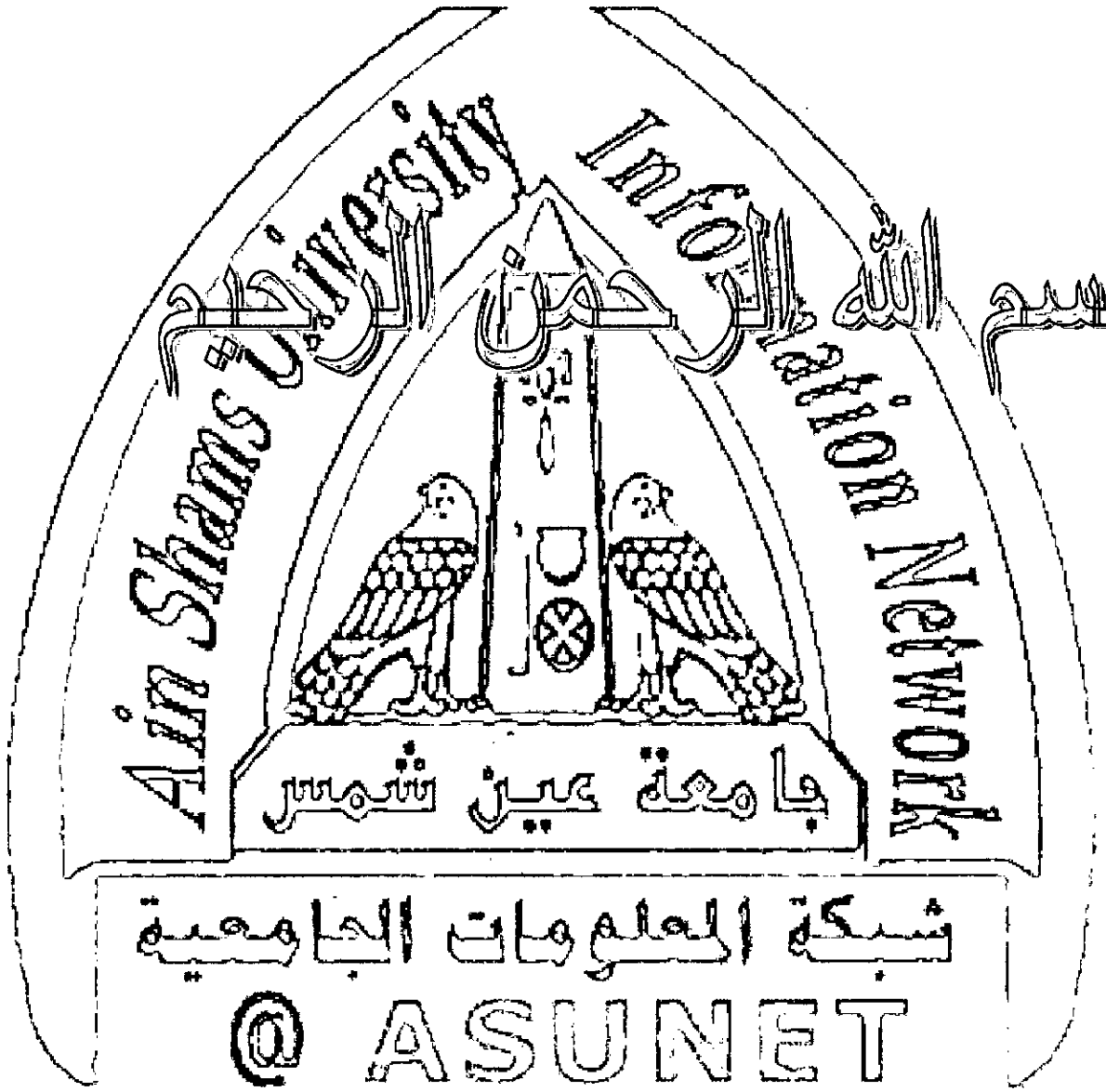
شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

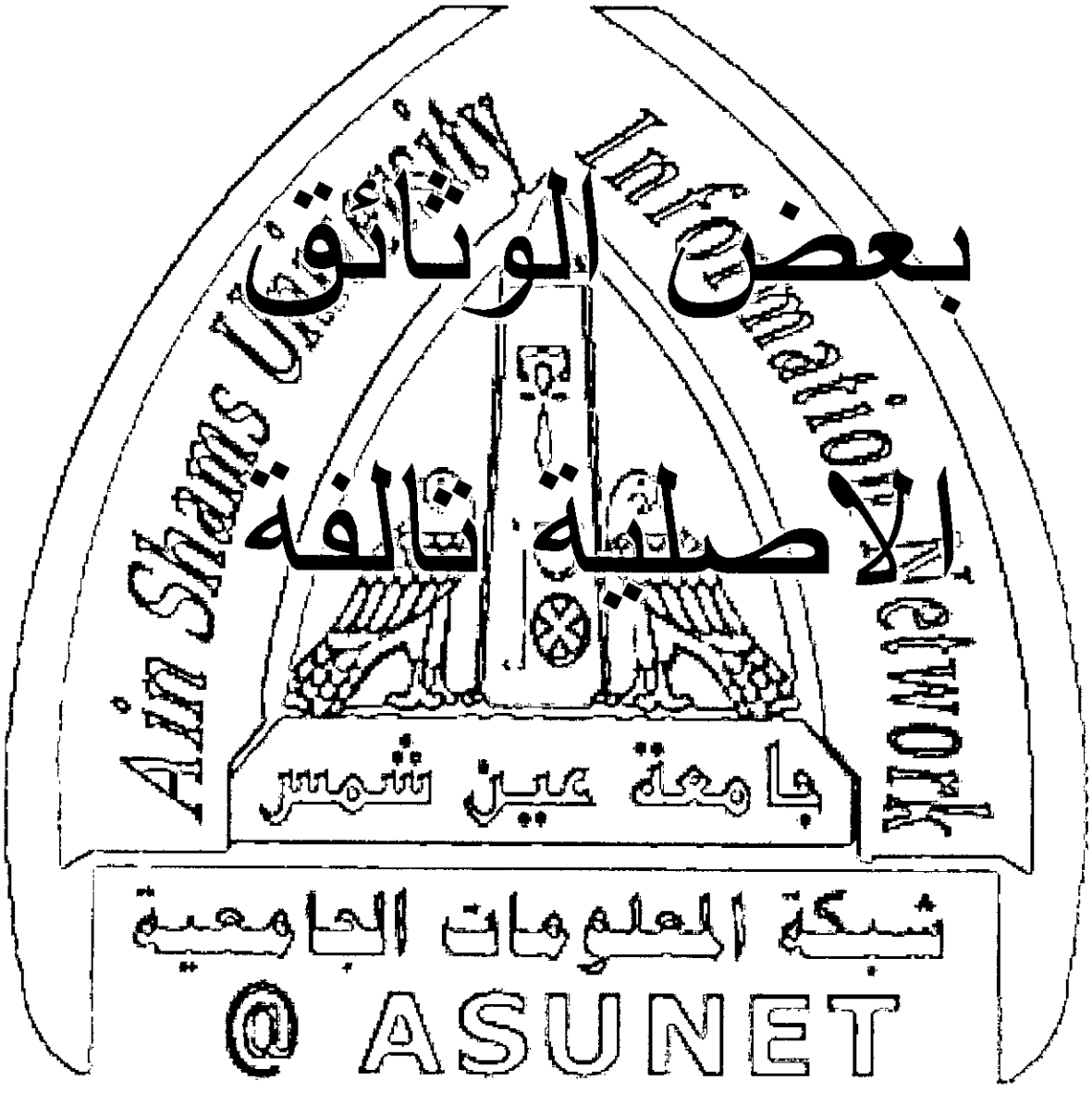
نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%



بعض الوثائق الأصلية تالفة

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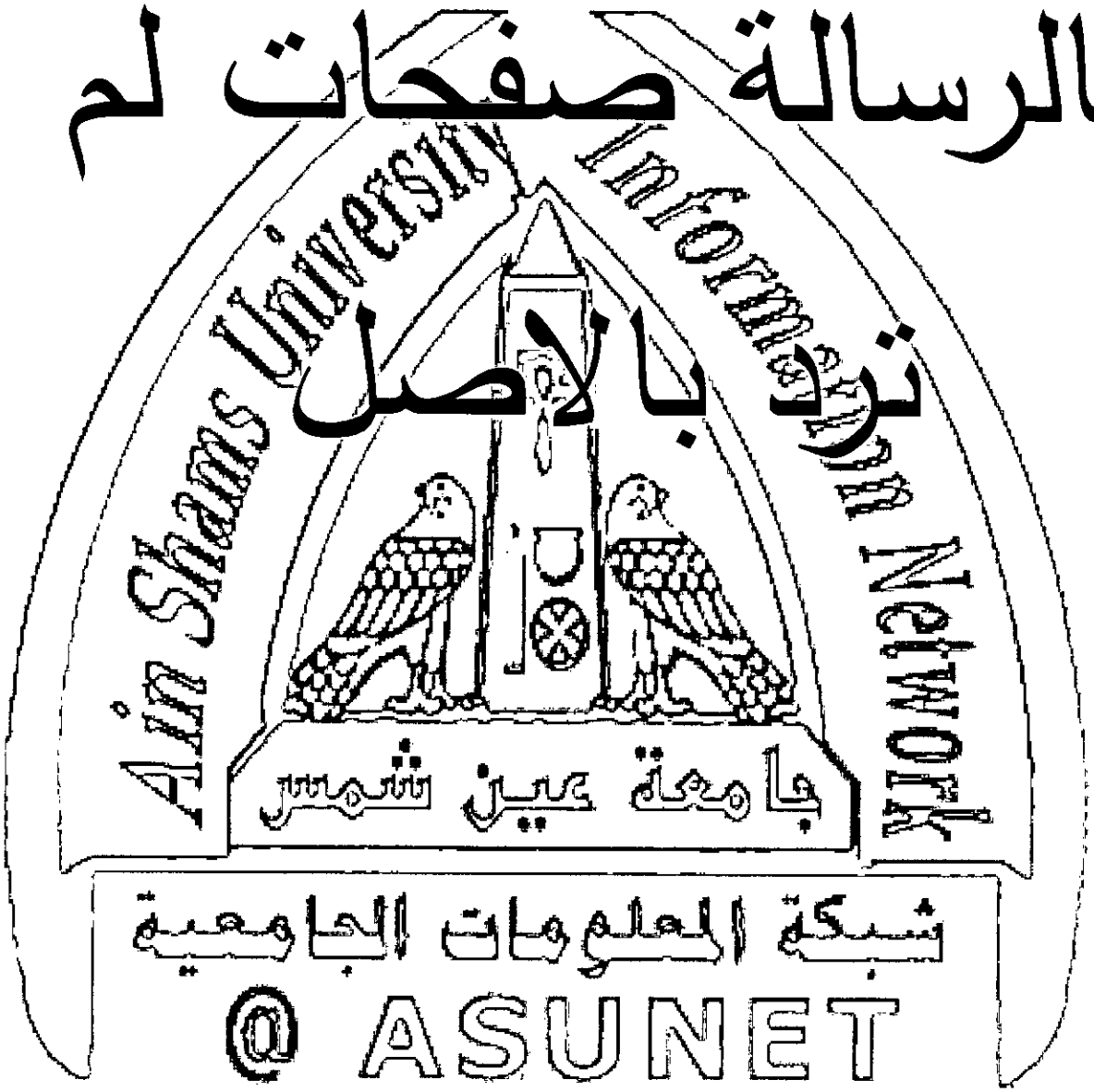

Relationship between Clinical Assessment and Drug Analysis of Some Common Drugs of Abuse in Egypt.

Thesis

Submitted for partial fulfillment of master degree In Clinical Toxicology

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Introduction and aim of the work

Introduction

Acute poisoning accounts for a substantial number of admissions to hospitals. About 15 to 20 % of workload of medical units, and 10% of the workload of accident and emergency departments are due to self-poisoning **(Jones AL, Volans., 1999).**

The patterns of drug abuse may provide a clue for the physician when evaluating the intoxicated patient. Consumption of illicit drugs is increasing **(Buajordet et al., 2004).**

Diagnosis of patient treated for acute poisoning in emergency department is based upon clinical assessment and routine laboratory analyses. Patient or companion histories, findings on the scene of the overdose and clinical signs and symptoms, are the main sources of information on drugs ingested. For drugs of abuse, routine drug screening, with the exception of benzodiazepines and ethanol, are usually not performed. The diagnosis of drugs of abuse is, therefore, mainly clinical **(Dawson et al., 2001).**

Previous studies report a significant amount of cases where drugs analyses and clinical diagnosis differ, whereas other Studies show a relatively good concordance **(Montague et al., 2001).**

The clinical impact of an imprecise diagnosis in these patients is being questioned. It claimed that an inaccurate diagnosis is not affecting mortality **(Montague et al., 2001),** nor being the cause of complications how ever, knowing the correct diagnosis could enable optimal treatment of acute poisoning by reducing the need for

supervision and costly treatment, and facilitating the identification of cases that require prompt drug-specific treatment. Thus, both morbidity and costs may be reduced **(Helliwell et al., 1979)**.

Emergency department can be important venues for detecting persons in need of substance abuse treatment. Use of illicit drugs may indicate substance abuse problems. A precise identification of substance may help physicians to identify patient who are using illicit drugs and this may help establish appropriate aftercare **(Rockett et al., 2003).**

Egypt, in particular, is greatly exposed to drug abuse problem owing to its geographical location between producing countries in the East and the large market of heroin in the West **(Okasha and Raafat, 1988).** Heroin users alone annually finance their heroin consumption by 400 millions Egyptian pounds **(Okasha et al., 1990).**

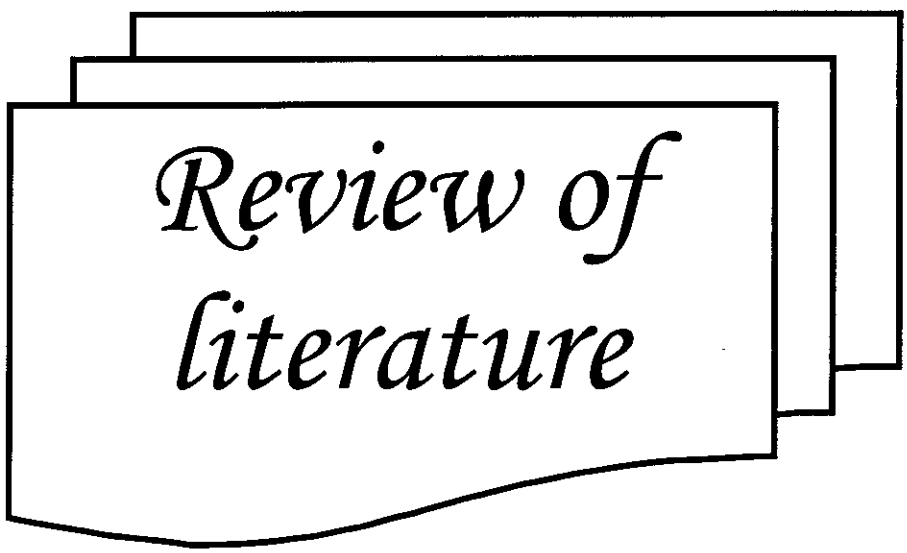
In the last few years, new patterns of drug abuse have appeared in Egypt. Bango become one of the most widely abused substances among Egyptians. This addictive drug represents a great problem in Egypt as it is easily cultured and cheaper if compared with other addictive drugs, so it is more available among addicts **(Musttaffa et al., 1997).**

Aim of the Work

The aims of this study were to assess the pattern of drugs of abuse according to age and gender for all patients admitted to the Poison Control Center of Ain Shams and EL-Mania University Hospitals.

Evaluating the concordance between the clinical assessment, including patient history by the physicians on duty, and the drug analysis for those patients.

Estimation the maximum period of detection of these drugs in blood and urine.


Review of
literature

General Background

A psychoactive drug is a drug that has an effect on the brain and central nervous system. It can affect the way a person thinks, feels or acts. By this definition alcohol, heroin and marijuana are psychoactive drugs, but insulin and penicillin are not **(Nesse and Berridge, 1997).**

An illicit drug is any chemical or mixture of chemicals, not required for the maintenance of health, which alters biologic function or structure. The term applies primarily to illegal medications **(Stahl, 1996).**

Many drugs are addictive. Sometimes the addiction is gradual, while with others, such as cocaine, addiction can happen after few doses **(Hollander and Hoffman, 2002).**

Physical dependence is an adaptive state that manifests itself by intense physical disturbances (withdrawal syndrome) when the administration of the drug is suspended or when its action is affected by the administration of a specific antagonist **(Qureshi et al., 2000).**

There are some substances that don't cause addiction but do cause physical dependence, such as some blood pressure medications, and substances that cause addiction but not classic physical dependence such as cocaine, so physical dependence is not always synonymous with addiction **(John, 2003).**

Psychological dependence is a state in which there is a feeling of satisfaction and psychic drive that requires periodic or continuous administration of the drug to produce pleasure or to avoid discomfort.

(Phillips and Prashant, 2004). But craving is the subjective need for a substance, usually experienced after decreased use or abstinence **(Tiffany and Carter, 1998).**

In 1965, the same WHO committee defined drug abuse; it is the consumption of a drug apart from medical need or in unnecessary quantities its nature and significance may be considered from two points of view. The first is concerned with drug dependence and the interplay between the pharmacodynamic actions of the drug and the physiological and psychological status of the individual. The second is concerned with the interaction between drug abuse and society, the interplay of a wide range of conditions, environmental, sociological, and economic **(Diala et al., 2004).**

The United States National Institute on Drug Abuse (NIDA) defines drug abuse as the use of illegal drugs or the inappropriate use of legal drugs to produce pleasure, to alleviate stress, to alter or avoid reality, or all three **(Elliott et al., 2005).**

An abstinence or withdrawal syndrome occurs after cessation of taking a drug to which one has become addicted. When use of the drug stops, the body fails to function normally because it has adjusted to compensate for the presence of the drug, and this abnormal functioning is felt as withdrawal **(Voth and Schwartz, 1997).**

Acute intoxication or overdose is the result of sufficient intake of the drug to produce signs and symptoms of distress **(Johnson, 2004).**

Tolerance is the ability of a regular user to need more and more of the drug to get the desired effect and increased tolerance means an increased risk for overdose **(Koob, 1998).**

. If a user stops exposure for a while, tolerance will decrease. After a period of abstinence, the dose the user had previously used may now be high enough to cause a fatal overdose **(Nutt, 1996).**

Synergism refers to the interaction of two drugs in such a way that the total effect is greater than the sum of the individual effects. Many accidental overdoses occur in this way, some of them ending in death **(Koob, 1998).**