

**STUDY OF PREVALENCE OF ABUSING
BENZODIAZEPINE, CANNABIS AND BARBITURATE
AMONG VIOLENCE INDUCED INJURED CASES AT
KASR EL-AINY EMERGENCY HOSPITAL**

Thesis

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FORENSIC AND CLINICAL TOXICOLOGY

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DEDICATION

TO MY FAMILY

**Especially my Husband ,my Mother ,My kids ,and all
my family members who support me.**

ABSTARCT

Interpersonal violence and illicit drug use are major public health challenges that are strongly linked. Involvement in drug use can increase the risks of being both a victim and/or perpetrator of violence, while experiencing violence can increase the risks of initiating illicit drug use. Debate continues as to whether the relationship between drugs and violence is causal or an association, with the two being linked through shared risk factors .

The aim of the study is to illicit a correlation between traumatic injury and some substances of abuse

KEYWORDS:

Violence, drug abuse, cannabis , barbiturates , benzodiazepine, accidents ,screnning.

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LIST OF ABBREVIATIONS

ADHD	attention-deficit hyperactivity disorder
THC	Tetrahydrocannabinol
BZs	Benzodiazepines
GAD	generalized Anxiety disorders
SSRIs	Selective serotonin reuptake inhibitors
SNRI	Selective norepinephrine reuptake inhibitor
GABA	Gamma amino butric acids
CNS	Central nervous system
UDSTs	Urine drug screening tests
GC–MS	Gas chromatography–mass spectrometry
LC–MS	liquid chromatography–mass spectrometry
EMIT	enzyme multiplied immunoassay technique
FPIA	fluorescent polarization immunoassay
MEIA	microparticle enzyme immunoassay
CEDIA	cloned enzyme donor immunoassay
KIMS	kinetic interaction of microparticles in solution
AAS	atomic absorption spectrometry
TLC	thin layer chromatography
GC	gas chromatography
HPLC	high performance liquid chromatography
UNDCP	United Nation Drug Control Program

INTRODUCTION

There is an increasing recognition of the public health about the importance of violence (**Krug et al., 2002**). It is currently among the top twenty causes of the worldwide loss of disability, and projected to increase in importance by 2030 according to the World Health Organization (**Mathers et al., 2008**).

Violence against women is a serious public health issue and associated with poor maternal and fatal outcomes (**Garcia-Moreno, 2009**). Particularly in urban areas, fear of violence undermines people's health and wellbeing (**Kjellstrom et al., 2007**).

Despite the importance of violence to health outcomes, the social and economic determinants of violence need further clarification. Individual-level factors have been investigated in longitudinal cohorts and population-based studies. Several characteristics are predictive of violent offending: behavioural problems at a young age, including aggression, under-age smoking, drinking; low IQ, educational achievement (**Farrington and Welsh, 2007**); low family income (**Loeber and Farrington, 1998**); as well as male sex (**Moffitt, 2001**).

Interpersonal violence and illicit drug use are major public health challenges that are strongly linked. Involvement in drug use can increase the risks of being both a victim and/or perpetrator of violence, while experiencing violence can increase the risks of initiating illicit drug use. Debate continues as to whether the relationship between drugs and violence is causal or an association, with the two being linked through shared risk factors (**Krug et al., 2002**).

Various substances are commonly abused including amphetamine, methamphetamine, various benzodiazepines, barbiturates, cocaine, natural and synthetic opiates including methadone, phencyclidine, marijuana, propoxyphene, methaqualone and glutethimide. In addition, various designer drugs such as 3,4-methylenedioxyamphetamine, 3,4-methylenedioxymethamphetamine and lysergic acid diethylamide (LSD) are also commonly abused. Many abused substances have a half-life and metabolites are often targeted for detection in the urine during workplace drug testing (**De la Torre et al., 2004**).

AIM OF THE WORK

The aim of the study is to illicit a relation between traumatic injury and some substances of abuse in different age groups of both sexes for presented patients in Emergency Department of Kasr Al Ainy Hospital, Faculty of Medicine, Cairo University from April 2014 to December 2015.

Studied variables includes:

Age, sex, residence, marital status, special habits such as smoking , educational level, occupational status and type of drugs of abuse (if known), history of operations, chronic systemic illness (diabetes, hypertension, renal, liver or blood disease or others), types of drug used before injury, and history of previous admission for traumatic injury, also manner of injury, cause of injury and type of the injury.

VIOLENCE

The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development or deprivation (**WHO, 2004**).

No country or community is untouched by violence. Images and accounts of violence pervade the media; it is on our streets, in our homes, schools, workplaces and institutions. Violence is a universal scourge that tears at the fabric of communities and threatens the life, health and happiness of us all. Each year, more than 1.6 million people worldwide lose their lives because of violence (**Barak, 2003**).

For everyone who dies as a result of violence, many more are injured and suffer from a range of physical, sexual, reproductive and mental health problems. Violence is among the leading causes of death for people aged 15–44 years worldwide, accounting for about 14% of deaths among males and 7% of deaths among females (**Hamm, 2004**).

Violence definition:

An agreement concerning a definition of what exactly 'violence' is (**Stanko, 2003**). One of the most common ways of defining violence is to only consider forms of *criminal* violence and to argue that violence is the use of force that had been prohibited by law (**Riedel and Welsh, 2002**).

However, whilst 'violence' might conventionally connote physical attack, the notion of physical violence represents a surprisingly broad spectrum of incidents (**Waddington et al., 2004**). This is obvious, even within the legal point of view which, typically, defines violence rather technically as "the actual or threatened, knowing or intentional application

of statutory impermissible physical force by one person directly against one or more other persons outside the contexts both of formal institutional or organizational structures and of civil or otherwise collective disorders and movements for the purpose of securing some end against the will or without the consent of the other person or persons". Thus, it may appear to be self-evident what violence' is but, in reality, 'violence' is "a slippery term which covers a huge and frequently changing range of heterogeneous physical and emotional behaviours, situations and victim-offender relationships" (**Levi and Maguire, 2002**).

Social scientists attempting to come to grips with the phenomenon find the concept of violence "either under-, or over-defined, or both" (**Schinkel, 2005**). Even though two overarching assumptions seem to be that: (1) violence is typically assumed to be motivated by hostility and the wilful intent to cause harm and (2) violence is-legally, socially, or morally-deviant human activity, it had been argued that these assumptions were based on 'conceptual quicksand' in which important questions about the defining attributes of violence had slipped away (**Jackman, 2002**) .

The very social and policy imperatives that had driven sociological analysis of violence had moulded and warped our understanding of it and spawned a conception of violence that was biased and morally charged and at the same time it was clouded and unwieldy (**Jackman, 2002**). Nearly all inquiries concerning the phenomenon of violence demonstrate that violence not only takes on many forms and possesses very different characteristics, but also that the current range of definitions is considerable and creates ample controversies concerning the question what violence is and how it ought to be defined (**Heitmeier and Hagan, 2002**).