

Risk Factors of Violence among Forensic Psychiatric Inpatients

Thesis submitted for partial fulfillment of M.D in psychiatry

By

Hussien Ahmed Hussien Ahmed Elkholy

M.B.B.ch., M.Sc. of Neuropsychiatry

Under supervision of

Prof. Alaa El-Din Mohamed Soliman

Professor of Psychiatry

Faculty of Medicine, Ain Shams University

Prof. Hisham Adel Sadek

Professor of Psychiatry

Faculty of Medicine, Ain Shams University

Dr. Hanan Mohammed Ezz El Din Azzam

Assistant Professor of Psychiatry

Faculty of Medicine, Ain Shams University

Faculty of Medicine
Ain Shams University

2013

عوامل الخطورة للعنف بين مرضى الطب النفسى الشرعى المحجوزين بالمستشفيات

توطئة للحصول على درجة الدكتوراه للأمراض النفسية
الطبيب/ حسين أحمد حسين الخولى

بكالوريوس الطب والجراحة
ماجستير الأمراض النفسية والعصبية
كلية الطب – جامعة عين شمس

والرسالة تحت إشراف

الأستاذ الدكتور/ علاء الدين محمد سليمان

استاذ الطب النفسى
كلية الطب – جامعة عين شمس

الأستاذ الدكتور/ هشام عادل صادق

استاذ الطب النفسى
كلية الطب – جامعة عين شمس

الدكتور / حنان محمد عز الدين عزام

استاذ مساعد الطب النفسى
كلية الطب – جامعة عين شمس

كلية الطب
جامعة عين شمس
2013

Risk Factors of Violence among Forensic Psychiatric Inpatients

Thesis submitted for partial fulfillment of M.D in psychiatry

By

Hussien Ahmed Hussien Ahmed Elkholy

M.B.B.ch., M.Sc. of Neuropsychiatry

Under supervision of

Prof. Alaa El-Din Mohamed Soliman

Professor of Psychiatry

Faculty of Medicine, Ain Shams University

Prof. Hisham Adel Sadek

Professor of Psychiatry

Faculty of Medicine, Ain Shams University

Dr. Hanan Mohammed Ezz El Din Azzam

Assistant Professor of Psychiatry

Faculty of Medicine, Ain Shams University

Faculty of Medicine
Ain Shams University

2013

عوامل الخطورة للعنف بين مرضى الطب النفسى الشرعى المحجوزين بالمستشفيات

توطئة للحصول على درجة الدكتوراه للأمراض النفسية
الطبيب/ حسين أحمد حسين الخولى

بكالوريوس الطب والجراحة
ماجستير الأمراض النفسية والعصبية
كلية الطب – جامعة عين شمس

والرسالة تحت إشراف

الأستاذ الدكتور/ علاء الدين محمد سليمان

استاذ الطب النفسى
كلية الطب – جامعة عين شمس

الأستاذ الدكتور/ هشام عادل صادق

استاذ الطب النفسى
كلية الطب – جامعة عين شمس

الدكتور / حنان محمد عز الدين عزام

استاذ مساعد الطب النفسى
كلية الطب – جامعة عين شمس

كلية الطب
جامعة عين شمس

2013



Acknowledgement

First and foremost, I feel always indebted to Allah the most kind and most merciful who enabled me to accomplish this work.

I am deeply grateful for the support and constructive guidance of many people, whose valuable assistance made this study possible.

I would like to express my profound gratitude to Prof. Alaa El-Din Mohamed Soliman for his encouragement and positive spirit. He had patiently gone through a series of revisions, aiming for highest degree of lucidity. Without his help this work would have never been completed. It is great honor to work under his guidance and supervision.

I am also grateful to Prof. Hisham Adel Sadek for his help and keen support.

I wish to convey my deep thanks and appreciation to Assistant Prof. Hanan Ezz El Din Azzam for her patience, encouragement, valuable instructions and advice throughout the work.



Acknowledgement

I would like to thank Dr. Suzan El Kholi for her help and guidance.

I wish to extend my appreciation to my professors, colleagues and friends who inspired and supported me through this work.

No words can express my affection and gratitude to my great parents, my wife and my daughter, whom I dedicate this work to.



List of Contents

	<i>Page</i>
Acknowledgement	I
List of Contents	III
List of abbreviations	IV
List of tables	V
List of Graphs	VII
Introduction and Aim of the work	1
Review of Literature	
• Chapter (I) History of Forensic Psychiatry	7
• Chapter (II) Conceptualization of Violence	17
• Chapter (III) Risk Factors of Violence	25
• Chapter (IV) Assessment of Violence	72
• Chapter (V) Risk Management	88
Subjects and methods	95
Results	109
Discussion	144
Limitations	159
Conclusion and Recommendations	160
Summary	162
References	174
Appendices	197



List of Abbreviations

APD	Antisocial Personality Disorder
BDZ	Benzodiazepines
COVR	Classification of Violence Risk
DSM	Diagnostic and Statistical Manual of Mental Disorders
ECA	Epidemiological Catchment Area study
EPQ	Eysnek Personality Questionnaire
HCR-20	Historical, Clinical and Risk Management-20
ICT	Iterative Classification Tree
NOS	Not Otherwise Specified
OC	Obsessive Compulsive
PD	Personality Disorder
PPV	Positive Predictive Value
PSMIs	Persons with Serious Mental Illnesses
SCID	Structured Clinical Interview for DSM-IV
SCID-II	Structured Clinical Interview for DSM-IV axis II disorders
SOAS-R	Staff Observation Aggression Scale –Revised
THC	Tetrahydrocannabinol
VIE	Venturesomeness, Impulsiveness and Empathy
VRAG	Violence Risk Appraisal Guide
WRVH	World report on violence and health



List of tables

		Page
Table 3.1	Factors that influence aggression	29
Table 3.2	MacArthur study: Summary of selected bivariate relationships	50
Table 3.3	Categorizing features of mental disturbances	52
Table 3.4	Risk factors for violence	54
Table 4.1	Basic rate problem	76
Table 4.2	Characteristics of nine risk assessment tools	84
Table 7.1	Sociodemographic characteristics among study cases	110
Table 7.2	Description of special habits among study cases	112
Table 7.3	Description of type of crime, psychiatric symptoms and diagnosis among study cases	113
Table 7.4	Description of personality disorders and their types among study cases	115
Table 7.5	Description of EPQ & VIE scores among study cases	117
Table 7.6	Description of EPQ & VIE among study cases	117
Table 7.7	Description of HCR-20 total score	118
Table 7.8	Description of HCR-20 level of risk among study cases	118
Table 7.9	Description of violence, number of events, provocation, means and target among study cases.	120
Table 7.10	Comparison between Violent and Non Violent cases as regards sociodemographic characteristics	121
Table 7.11	Comparison between Violent and Non Violent cases as regards special habits	123
Table 7.12	Comparison between Violent and Non Violent cases as regards type of committed crime	125
Table 7.13	Comparison between Violent and Non Violent cases as regards psychiatric symptoms and diagnosis	126
Table 7.14	Comparison between Violent and Non Violent cases as regards personality disorder	127
Table 7.15	Comparison between Violent and Non Violent cases as regards type of personality disorder	129
Table 7.16	Comparison between Violent and Non Violent cases as regards EPQ & VIE	131



Tables

Table 7.17	Comparison between Violent and Non Violent cases as regards EPQ & VIE scores	132
Table 7.18	Comparison between Violent and Non Violent cases as regards HCR-20 total score and clinical sub-scale score	133
Table 7.19	Comparison between Violent and Non Violent cases as regards HCR-20 scale	133
Table 7.20	Description of personal characteristics among non consenting study cases	136
Table 7.21	Description of special habits among non consenting study cases	137
Table 7.22	Description of type of crime and diagnosis among non consenting study cases	138
Table 7.23	Description of violent event, number of events, provocation, means and target among non consenting study cases	138
Table 7.24	Differences between consenting and non consenting groups as regard sociodemographic factors	139
Table 7.25	Differences between consenting and non consenting groups as regard special habits	140
Table 7.26	Differences between consenting and non consenting groups as regard type of the crime and psychiatric diagnosis	141
Table 7.27	Differences between consenting and non consenting groups as regard aggression	142



List of graphs

		Page
Graph 7.1	Marital status among consenting subjects	111
Graph 7.2	Prevalence of special habits among study cases	112
Graph 7.3	Percentage of cases who still have active psychiatric symptoms	114
Graph 7.4	Prevalence of personality disorders among study cases	116
Graph 7.5	Prevalence of high scores on criminality in EPQ among study cases	118
Graph 7.6	Risk level for violence among study cases according to HCR-20 scores	119
Graph 7.7	Incidence of violence among study cases	120
Graph 7.8	Comparing violent and non violent cases as regards gender	122
Graph 7.9	Comparing violent and non violent cases as regards special habits	123
Graph 7.10	Comparing violent and non violent cases as regards cigarettes smoking	124
Graph 7.11	Comparing violent and non violent cases as regards the presence of active psychiatric symptoms	126
Graph 7.12	Comparing violent and non violent cases as regards the presence of personality disorders	128
Graph 7.13	Comparing violent and non violent cases as regards the presence of borderline personality disorder	130
Graph 7.14	Comparing the mean of HCR-20 total score between violent and non violent study cases	134



Introduction

The forensic evaluation is unlike a mental health evaluation for clinical or treatment purposes in several aspects. Clinical evaluations serve the healthcare needs of the individual, while forensic evaluators have legal goals that serve other parties (*Heilburn, 2001*).

One of the most important issues in the area of correctional and forensic psychiatric treatment is the question of its crime prevention effectiveness. Politicians, media, and the public frequently discuss the issue, and clinicians and researchers in the field are often asked for answers. There have been important developments in terms of the accuracy of assessments of risk for violence among persons with mental disorders (*McNiel & Binder, 1994; Quinsey et al., 1998; Douglas et al., 1999; Monahan et al., 2000, 2001; Steadman et al., 2000*).

The terms “aggression” and “violence,” while essentially interchangeable, do differ in as much as the former is predominantly an empirical term and the latter predominantly a forensic term. There are different definitions of violence. One definition is that violence is actual, attempted, or threatened harm to a person or persons. A behavior which would be fear-inducing to the average person may be counted as violence. Violence is a



description of the act itself, not the damage to a victim (*Webster et al., 1997*).

Most countries subject both psychiatrists and other medical practitioners in the field to special obligations for assessing the danger that individual patients pose to themselves and others. The ultimate purpose of such assessments is not prediction, but prevention. Prevention is of utmost importance as many studies suggest that although mental illness constitutes a risk factor for violent crime, a mentally ill person has only a moderate risk of being prosecuted for such an offense (*SBU, 2005*).

Risk factors for violence in people with mental disorders are not similar to those for other groups. Criminal history and personal demographic variables are the strongest predictors. Other established risk factors for violence in people with psychosis are comorbid substance misuse, active psychotic symptoms, non compliance with medication and comorbid personality disorder, particularly antisocial personality disorder (*Swanson et al., 1990; Webster et al., 1997; Bonta et al., 1998; Link et al., 1998; Swartz et al., 1998*).

Prediction of violence has been shown repeatedly to be a difficult clinical task, and the accuracy of such predictions has usually been deemed poor. Some researchers have proposed that actuarial methods - risk assessment based on statistical data- can



enhance clinical assessments of potential for violence, which have traditionally been based on reviews by multidisciplinary staff (*Soliman and Reza, 2001*).

In other words, risk assessments can be made in a number of different ways. Two traditional methods for making decisions-clinical and actuarial models-have been discussed in the medical and behavioral sciences literatures and have been applied to violence risk assessment. The clinical method has been described as an “informal, ‘in the head,’ impressionistic, subjective conclusion, reached (somehow) by a human clinical judge”. In contrast, the actuarial method has been described as “a formal method” that “uses an equation, a formula, a graph, or an actuarial table to arrive at a probability, or expected value, of some outcome” (*Douglas et al., 2003*).

Originally, only clinical, unstructured assessments were performed. Instruments and structured methods became increasingly popular in the 1970s. The use of a combination of instruments and structured interviews is now on the rise (*SBU, 2005*). This could be justified by the fact that actuarial predictions of future violence based on static nonpsychiatric characteristics achieve greater statistical accuracy than purely clinical methods, but the former are insensitive to effects of treatment and do not inform clinical intervention in an established way (*Norko and Baranoski, 2008*). Thus, the



structured clinical examination of violence attempts to integrate the scientific (actuarial) approach and the clinical judgment practice of risk assessment (*Doyle and Dolan, 2002*).

Literally dozens of clinical and legal settings call for violence risk assessment and management by mental health professionals. One example is release from forensic psychiatric hospitalization. A prominent development in the risk assessment field has been the focus of research on instrumentation and models of decision making (*Douglas et al., 2003*).