SLEEP PROFILE IN PATIENTS WITH SCHIZOPHRENIA: A POLYSOMNOGRAPHIC EVALUATION IN AN EGYPTIAN SAMPLE

Thesis

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Marwa Mohamed Ghanem

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LIST OF ABBREVIATIONS

#WK	Number of awakenings
AP	Antipsychotics
CPAP	Continuous Positive Airway Pressure
FGAs	First Generation Antipsychotics
HFA	High-Frequency Activity
ICSD	The international Classification of Sleep Disorders
N1	Non-REM stage 1
N2	Non-REM stage 2
OSA	Obstructive Sleep Apnea
OSAS	Obstructive Sleep Apnea Syndrome
PLMD	Periodic Limb Movement Disorder
PSG	Polysomnography
RDI	Respiratory Disturbance Index
REM	Rapid Eye Movement
RL	REM latency
RLS	Restless Legs Syndrome
SBD	Sleep Related Breathing Disorder
SE	Sleep Efficiency
SGAs	Second Generation Antipsychotics
SL	Sleep Latency
SWA	Slow-Wave Activity
SWS	Slow-Wave Sleep
TST	Total Sleep Time
WASO	Waking minutes after sleep onset

GLOSSARY

Sleep latency	Time from lights out until first occurrence of sleep
Sleep efficiency	Percentage of time in bed spent asleep
REM onset latency	Time between sleep onset and the first occurrence of REM
REM density	Measure of frequency of rapid eye movements during REM sleep
Slow wave sleep	Amount of non-REM sleep stages 3 and 4 (also known as delta sleep)
Total Sleep Time (TST)	Total time spent in any REM or NREM sleep stage
Sleep Period Time (SPT)	Time from sleep onset until final awakening, including intermittent waking periods

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INTRODUCTION

The relationship between sleep and schizophrenia has been fascinating scientists, clinicians, philosophers and the patient themselves for immemorial times, most probably because of the perceived similarity between the positive symptoms of schizophrenia and dreaming. Psychosis has been considered as a state of waking dreams **(Freud, 1900)** More recently, this idea has been received both by neuro psycho-analysists such as **Carhart-Harris, 2007** and neuroscientists such as **Gottesmann, 2006** who found not only a physiological resemblance but also strong neurobiological similarities between the dreaming state and schizophrenia **(Kramer, 2000).**

Difficulties initiating or maintaining sleep are frequently encountered in patients with schizophrenia. Disturbed sleep can be found in 30-80% of schizophrenic patients, depending on the degree of psychotic symptomatology. Measured by polysomnography, reduced sleep efficiency and total sleep time, as well as increased sleep latency, are found in most patients with schizophrenia and appear to be an important part of the pathophysiology of this disorder. Some studies also reported alterations of stage 2 sleep, slow-wave sleep (SWS) and rapid eye movement (REM) sleep variables, i.e. reduced REM latency and REM density. A number of sleep parameters, such as the amount