# PREVALENCE OF INFANTS AND CHILDREN ADMITTED TO EMERGENCY DEPARTMENT DUE TO ACUTE NON-TRAUMATIC COMA

## IN THE PEDIATRIC SPECIALIZED HOSPITAL CAIRO UNIVERSITY

# Thesis Submitted for partial fulfillment of M.Sc. Degree in pediatrics

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﴿ وَ عَلَّمَكَ مَا لَمْ تَكُن تَعْلَمُ وَكَانَ فَضْلُ اللَّهِ عَلَيْمًا ﴾ عَلَيْكَ عَظِيمًا ﴾

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#### **Abbreviations**

A&E: Accident & Emergency

AAC: Amino acid chromatography

ABCs: Airway patency, Breathing, and Circulation

ABG: Arterial Blood Gases

ACTH: Adrenocorticotropic Hormone

ADH: Anti-Diuretic Hormones

AIDS: Acquired Immune Deficiency Syndrome aPTT: activated Partial Thromboplastin Time ARAS: Ascending Reticular Activating System ARDS: Acute Respiratory Distress Syndrome

ARF: acute renal failure

ATLS: Advanced Trauma Life Support

ATP: Adenosine Tri-Phosphate

AVMs: Arterio-Venous Malformations

AVPU: Alert, Voice response, Pain response, Unresponsive

BBB: Blood Brain Barrier

BBGD: Biotin-responsive Basal Ganglia Disease

BMI: Body Mass Index

BNF: British National Formulary

BP: Blood Pressure

BUN: Blood Urea Nitrogen
CBC: Complete Blood Count
CBF: Cerebral Blood Flow

CDC: Centers for Disease Control and Prevention

CDG: Carbohydrate-Deficient Glycoprotein Syndrome

CMRO2: Cerebral Metabolic Rate for Oxygen

CMV: Cytomegallo Virus

CNS: Central Nervous System

CO: Carbon Monoxide

COHMC: Children's Orthopedic Hospital and Medical Center

CI: Confidence interval

COPD: Chronic Obstructive Pulmonary Disease CPAP: Continuous Positive Airway Pressure

CPP: Cerebral Perfusion Pressure

CPR: Cardio-Pulmonary Resuscitation

CRP: C Reactive Protien
CSF: Cerebro-Spinal Fluid
CT: Computed Tomography

CXR: Chest X Ray

DCL: Disturbed conscious level

DIC: Disseminated Intravascular Coagulation

DKA: Diabetic Keto-Acidosis

DNPH: Di-nitro-phenyl-hydrazine test DOT: Directly Observed Therapy

ds: Double strand

DWI: Diffusion Weighted Imaging

EBV: Epstein-Barr virus. ECG: Electrocardiogram

ECMO: Extra-Corporeal Membrane Oxygenation

ED: Emergency Department EEG: Electroencephalograph

ELISA: Enzyme-Linked Immunosorbent Assay

EMG: Electromyogram

EOM: Extra Ocular Movements

ER: Emergency Room

ESPE/LWPES European Society for Paediatric Endocrinology/Lawson Wilkins

Pediatric Endocrine Society consensus statement on diabetic

ketoacidosis in children and adolescents

ESR: Erythrocytes Sedemintation Rate

EW: Emergency Ward FAO: Fatty Acid Oxidation

FAOD: Fatty Acid Oxidation Disorder

FBC: Full Blood Count

FDP: Fructose-1, 6-Diphosphatase

FOUR: Full Outline of Unresponsiveness

GA I: Glutaric Aciduria Type I
GA type I: Glutaric Aciduria type I
GABA: G Amino-Butyric Acid
GCS: Glasgow Coma Scale

GIT: Gastrointestinal tract
GLUT-1: Glucose Transporter-1
GP: General Practitioner

GSD: Glycogen Storage Disorders

GTCS: Generalized Tonic Clonic Seizures

Hb: Hemoglobin

HCG: Human Chorionic Gonadotropin

HHS: Hyperglycemic Hyperosmolar Syndrome

3HiB-uria: 3 Hydroxy-iso-Butyric Aciduria HIDA: Hydroxy-Imino-Diacetic Acid HIE: Hypoxic-Ischemic Encephalopathy

HIV: Human Immunodeficiency Virus

HMG CoA lyase: 3-Hydroxy-3-Methylglutaryl Coenzyme A Lyase

ICH: Intra-cerebral Hemorrhage

ICP: Intra-cranial Pressure ICU: Intensive Care Unit

IEM: inborn errors of metabolism

IgG: immunoglobulin G
IgM: immunoglobulin M
IVA: Isovaleric Academia
IVA: Isovaleric Aciduria

IVC: Continuous Intravenous InfusionIVH: Intra-ventricular Hemorrhage

KFT: kidney function test
LFT: Liver Function Tests
LOC: Level of Consciousness

LP: Lumbar Puncture

MAP: Mean Arterial Pressure

MCD: Multiple Carboxylase Deficiency

MGCS: Modified Glasgow Coma Scale for Infants and Children

MMA: Methylmalonic Acidemia
 MMA: Methylmalonic Aciduria
 MMR: Mumps; Measles, Rubella
 MRI: Magnetic Resonance Imaging
 MSUD: Maple Syrup Urine Disease

NABSA: Nucleic Acid Sequence-Based Amplification Technique

NAGS: N-acetylglutamate synthase NCS: Non-convulsive Seizures

NCSE: Non-convulsive Status Epilepticus

NG: Naso-gastric

NH<sub>3:</sub> ammonia free base NH<sub>4</sub><sup>+</sup>: the ammonium ion

NICE: The National Institute for Health and Clinical Excellence

NIV: Non-Invasive Ventilation

NSAIDS: Non-Steriodal Anti-Infilammatory Drugs

OAC: Organic Acid Chromatography

OR: Odds ratio

OTC: Ornithine Transcarbamylase

PA: Propionic Acidemia
PA: Propionic Aciduria
PaCO2: Arterial CO2 Tension
PC: Pyruvate Carboxylase

PCR: Polymerase Chain Reaction
PDH: Pyruvate dehydrogenase

PDHk: Pyruvate dehydrogenase kinase
PEEP: Positive End Expiratory Pressure
PICU: Pediatric Intensive Care Unit

PPP: Pin point pupil
PR: Pulse Rate

PSHCU: Pediatric Specialized Hospital, Cairo University

PT: Prothrombin Time
PTH: Parathyroid Hormone

PTT: Partial Thromboplastin Time PVS: Persistent Vegetative State RAS: Reticular Activating System

RBC: Red Blood Cell

RD: Respiratory distress

rFVIIa: recombinant Factor VIIa

RN: Registered Nurse

RTA: Renal tubular acidosis

SAH: Sub-arachnoid Haemorrhage

SD: Stander Deviation