

# **Nursing Assessment for Patients with Cerebral Stroke during First Golden Hours**

*Thesis*

*Submitted for Partial Fulfillment of the Master Degree  
In Nursing Sciences (Critical Care Nursing)*

*By*

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**Ramez Fathy Khatab**

# Dedication

*This work is dedicated to ...*

My father, to whom i owe everything.

My mother, for always being there for me.

My brother, my sister and my friends for their support.

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## List of Abbreviations

Abb.	Full term
ABCs .....	Airway, Breathing and Circulations.
ABGs .....	Arterial Blood Gases.
ACE .....	Angiotensin-Converting Enzyme.
ADLs .....	Activity Daily livings.
AHA.....	American Heart Association.
AHRQ.....	Agency for Health care Research and Quality.
AIS.....	Acute Ischemic Stroke.
AOTA.....	American Occupational Therapy Association.
APN.....	Advanced Practice Nurse.
APTA.....	American Physical Therapy Association.
ARBs .....	Angiotensin Receptor Blockers.
ASA .....	American Stroke Association.
AVM .....	Arterio Venous Malformation.
AVPU .....	Alert Voice Pain Unresponsive.
BAF .....	Brain Aneurysm Foundation.
CAB.....	Circulation, Airway and Breathing.
CAS .....	Carotid Angioplasty and Stenting.
CBF .....	Cerebral Blood Flow.
CDC.....	Centers for Disease Control and Prevention.
CEA.....	Carotid Endarterectomy.
CSF.....	Cerebro Spinal Fluid.
CT.....	Computed Tomography.
CUMC .....	Columbia University Medical Center.
DNA.....	Deoxyribo Nucleic Acid.
ECG.....	Electrocardiogram.
ED .....	Emergency Department.
EMTs.....	Emergency Medical Technicians.
FFP.....	Fresh-frozen Plasma.
HMG-CoA.....	Hydroxy Methyl Glutaryl Coenzyme A.

## List of Abbreviations (Cont'd)

<b>Hrs</b> .....	: Hours.
<b>HSF</b> .....	: Heart and Stroke Foundation.
<b>HT</b> .....	: Hemorrhage Transformation.
<b>ICH</b> .....	: Intra Cerebral Hemorrhages.
<b>ICP</b> .....	: Intracranial Pressure.
<b>ICU</b> .....	: Intensive Care Unit.
<b>IV</b> .....	: Intravenous.
<b>LP</b> .....	: Lumbar Puncture.
<b>MCQ</b> .....	: Multiple Choice Questions.
<b>MI</b> .....	: Myocardial Infarctions.
<b>ML</b> .....	: Milliliter.
<b>MMHG</b> .....	: Mille Meters of Mercury.
<b>mOsm/L</b> .....	: milliosmole/Liter.
<b>MRI</b> .....	: Magnetic Resonance Imaging.
<b>MRIs</b> .....	: Magnetic Resonance Images.
<b>MTI</b> .....	: Modern Technology and Information.
<b>NANDA</b> .....	: North American Nursing Diagnosis Association.
<b>NGT</b> .....	: Nasogastric tube.
<b>NINDS</b> .....	: National Institute of Neurological Disorders and Stroke.
<b>NNCT</b> .....	: Non-contrast Computed Tomography.
<b>NPE</b> .....	: Neurogenic Pulmonary Edema.
<b>NPO</b> .....	: nil per os (nothing by mouth).
<b>NP's</b> .....	: Nurse Practitioners.
<b>NSA</b> .....	: National Stroke Association.
<b>PCC</b> .....	: Prothrombin Complex Concentrate.
<b>PT</b> .....	: Physical Therapist.
<b>RN</b> .....	: Registered Nurse.
<b>ROM</b> .....	: Rang Of Motion.
<b>rtPA</b> .....	: recombinant tissue Plasminogen Activator.

## List of Abbreviations (Cont'd)

<b>SAH</b> .....	Subarachnoid Hemorrhage.
<b>SpO<sub>2</sub></b> .....	Saturation of peripheral Oxygen.
<b>SRS</b> .....	Stereotactic Radio Surgery.
<b>SSOC</b> .....	Stroke System of Care.
<b>TIA</b> .....	Transient Ischemic Attack.
<b>tPA</b> .....	tissue Plasminogen Activator.
<b>UBC</b> .....	University of British Columbia.
<b>WHO</b> .....	World Health Organization.

## List of Appendices

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# Abstract

**Background:** Strokes associated with high mortality and severe morbidity and create significant and enduring impact upon patients, their families, and the wider society. **Aim:** This study aimed to assess nurses' knowledge regarding cerebral stroke and their nursing management during first golden hours, assess nurses' practice for patients with cerebral stroke during first golden hours and assess factors that affect nurses' performance in management of patients with cerebral stroke during first golden hours. **Design:** A descriptive exploratory study design was used. **Sample:** A convenient sample of (80) nurses both male and female. **Setting:** Data were collected from Intensive Care Units at Ain Shams University and specialized hospital which affiliated to Ain Shams University in Egypt. **Tools:** Two tools were used for data collection: Nurses' self-administered questionnaire and nurses' performance observational checklists. **Results:** This study revealed that 63.75% had unsatisfactory level of knowledge, 68.8% had unsatisfactory performance in practice, and there were human and non-human resources factors both of them affect negatively on nurses' performance in management of patients with cerebral stroke disease. **Conclusion:** The study concluded that, there were unsatisfactory score of nurses' knowledge and practice and there were human and non-human resources factors affected negatively on nurses' performance. **Recommendation:** This study recommended that, periodic education programs must be developed for nurses about care which give to patients with cerebral stroke during first golden hours, and prospective follow up studies are needed to develop and refine interventions.

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**Keywords:** Stroke, knowledge, practice.

## **Introduction**

Cerebrovascular disorder is an umbrella term that refers to a functional abnormality of the central nervous system that occurs when the blood supply to the brain is disrupted. Suffering from cerebrovascular disorder affects survivors' quality of life, personal, social, vocational, and physical which can result in social stigmatizing for the individual which might affect the individual in a negative way (**Gillen, 2015**).

Stroke known as cerebrovascular accident, it is the sudden development of injury to the brain caused by the disruption of blood flow cause oxygen deprivation to the surrounding cells and result in the death or injury of brain tissue (**Norving, 2014**).

Ischemic strokes make up approximately 80% of all strokes, while hemorrhagic strokes account for the remaining 20%. Although hemorrhagic strokes are less common, they result in a higher mortality rate. The location of the lesion created as well as the size and cause determine what kinds of symptoms the patient will experience. On another hand there is transient ischemic attack (TIA) which isn't included in the definition, as the