

Introduction

Traumatic brain injury in children and adolescents is a major public health problem in the world, involving the annual hospitalization for acute brain trauma of about 100,000 children under 15 years of age. (*Cary, M.E, Smith, R.M. 2006*).

Head injuries in the pediatric age group (Less than or up to 16 or 18 years) have many features that distinguish them from injuries in the adult age group. While head trauma is common among infants, children and adolescents. (*Brown GL. 2002*).

Common causes of head injury include traffic accidents, industrial accidents, occupation accidents, falls, physical assualt and accidents in the home (*William*, *J. Hueston*, 2001).

Traumatic brain injury is a serious and debilitating injury. Child with a sever head injury often have problems with mental and physical functioning and may require on-going supervision and assistance as a result of post concussion syndrome (*Poots*, *D.G. 2005*).

Traumatic head injury in the world:

Trauma to the head can consider as a medical and surgical problems, ranging from mild to sever. Each year, childhood head injures result more than 500,000 emergency room visits in the United States, with more than 95,000 hospitalization. Although 90 percent of the all childhood head injuries are



minor, about 7,000 children die each year of head trauma and an additional 29,000 develop permanent disabilities (*Sarna F.L and Farrell J.B. 2006*).

The most common causes of childhood head injuries in the world are motor vehicle accidents, falls, assaults, bicycle accidents and trauma related to sports. In infants younger than one year old, more than 95% of serious head injuries are related to child abuse (*Nandellen*, *J. R. 2005*).

Child with head injury may develop unconsciousness, bleeding or clear fluid from the nose or ear or mouth, dizziness, loss of bowel control and other dangerous signs as repeated vomiting or nausea, headache, seizures, weakness in the extremities and loss of coordination (*Teasdale & Jennet*, 2002).

Effects of head injury on children may be include attention and arousal disorder, communication and language difficulties, in additional to loss of memory, diminished ability to learn and visual and auditory perception as mentioned by *Laurence F*, *Nazarian MD*, (2000-2003). Complications of head injury in children may be include seizures, hydrocephalus, cerebrospinal fluid leaks, bed sores, infections and cranial nerve injuries (Sutton, L.N. 2006).

The initial management of head injury includes proper history taking, cardiopulmonary stabilization, general examination, emergency measures for associated injuries (as tracheostomy, chest tubes, neck stabilization and abdominal



paracentesis), proper neurolgoic examination, therapeutic agents and investigations. C.T. scanning is clearly the procedure of choice in the evaluation of the head injured patient and has probably significantly improved the outcome of management after head injury (*Aronyk*, 2006).

Nurses have a major effective role for child with head injury such as assessment – observation – emotional support and rehabilitation role. Nurse should monitor and document of the neurological signs such as level of consciousness (Glasgow Coma Scale) eye movement, verbal response and motor movement (*Danielw-Shea JY*, 2000-2003).

Also the nurse has important role in educating the parents of children with head injury, also understandable, printed instructions should be given to the parent when child deteriorated or loss of consciousness (*Kilian*, *J- and Jana*. *U* 2005).

Significance of The Study

It was observed from Neurosurgical Department and Emergency Department in Benha University Hospital and Teaching Hospital in Benha that Nurses Lack Skills and Knowledge Regarding Head Injury and its care which result in dangerous complication. So it is important to conduct this study to assess nurses knowledge and skills about head injury in children.