

# ASSESSMENT OF PEDIATRIC TBI PATTERN USING THE GLASGOW SCALE AT ALL THE LEVELS OF MEDICAL CARE



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# ❖ INTRODUCTION

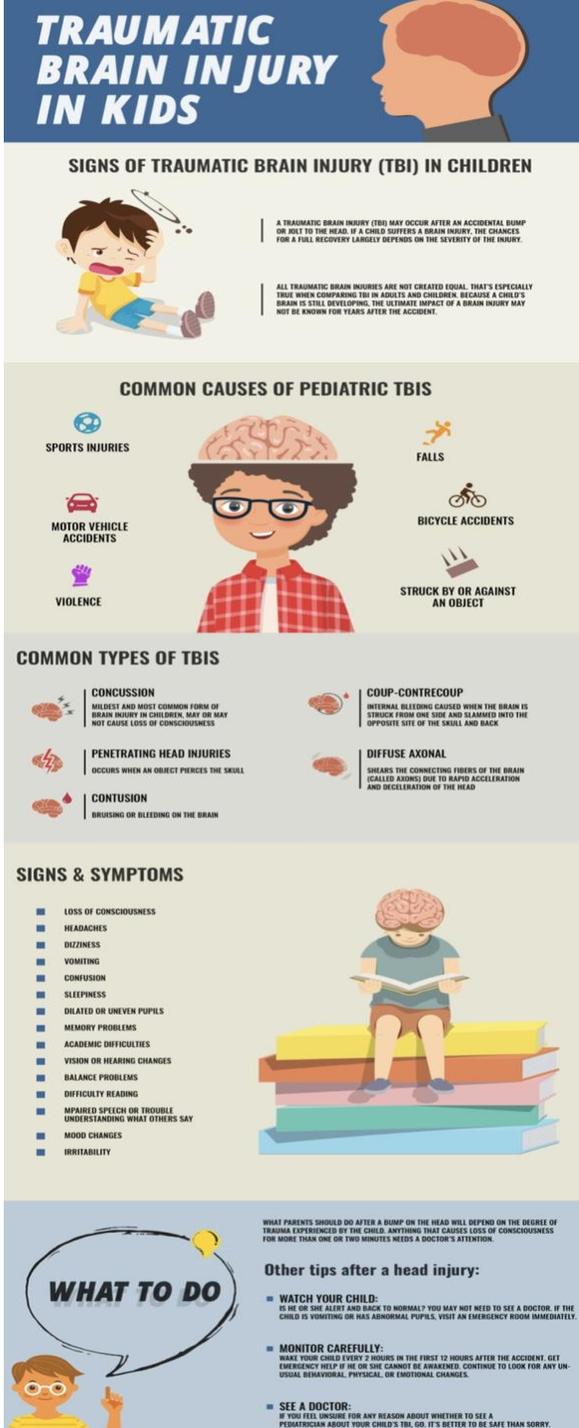
- Traumatic brain injury (TBI) is one of the major public health problems and the leading cause of death and disability worldwide among children and adolescents.
- The data reveals that 1 of every 20 emergency department presentations at pediatric hospitals is caused by a TBI, more common than burns or poisonings.
- The epidemiologic characteristics and outcomes of pediatric TBI have not been adequately registered in the Republic of Moldova. The Glasgow Coma Scale (GCS) is one of the tools used in the assessing the TBI severity and optimal medical care.

## ■ AIMS

- The aim of the research was to evaluate the state of consciousness among children with TBI at all levels of medical care.

## ➤ METHODS

- A prospective study was piloted among children with TBI in a large Municipal Pediatric Hospital "Valentin Ignatenco" from Chisinau for a period of 6 months (March 1 - August 31, 2019). A questionnaire was applied for data collecting from the medical records. The Red Cap electronic data collection tool was used to upload the data and analyzed thought Epi Info 7.



## ❖ RESULTS

✓ The total number of pediatric TBI patients was 167:

- male patients - 109, (65,3%)

-58 female patients (34,7%).

✓ The average age among injured children was  $9,0 \pm 5,04$  years old.

✓ **Pre-hospital period:**

- in the consciousness (GCS 15p) were 57 children (34,1%),

- in the state of moderate obnubilation (13-14p) were 103 children (61,7%),

- state of profound obnubilation with (11-12p) were 4 children (2,4%),

- sopor state (8-10p) - 3 children (1,8%).



## ❖ RESULTS

✓ The state of the majority of TBI children worsened during their transportation to the ED.

✓ **At the moment of coming to ED:**

- conscious state were 30 children (18%),

- state of moderate obnubilation - 102 children (61,1%),

- state of profound obnubilation – 25 children (15%),

- in the sopor state - 2 children (1,2%),

- in moderate Coma I state (6-7p) were 5 children (3%),

- in profound Coma II state - 2 children (1,2%).

❖ **During the treatment, the state of the patients has been changed:**

- with GCS 15p were 155 children (92,8%),

- 13-14p - 3 children (1,8%).

- coma III exceeded state (3p) 9 children have died (5,4%).



# ❖ CONCLUSION

➤ The results have shown some gapes in the provision of medical care of TBI that impose us to reevaluate and adopt some new politics of health and guidelines of TBI patients' preventions and treatment.

- **Key words:** TBI, GCS, treatment, prevention.

