

Domains of Nursing Assessment for Head Injury Children

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THE advent of industrial revolution brought radical improvement in science and technology. A man could achieve a lot in transportation and communication. But one of the major health problems increasing steadily is the disability and mortality due to accidents. Accidental injury is the major single cause of death and disability in the Paediatric age group.

Accidental injuries in children may occur on road, in homes, schools and playgrounds. Physical characteristics of children such as proportionately larger head, immature motor skills of infants, the natural curiosity and exploring nature predisposes them to incur accidental injury.

The Paediatric Nurse plays an important role in observing the subtle changes through Nursing assessment. The Nursing assessment includes determining general condition, posture attained, level of sensorium, acceptance of feed, signs of increased intracranial pressure, vital signs, bleeding and C.S.F. leakage, from ear, nose and throat, pupillary reaction, motor and verbal response. In the follow-up phase developmental maturity and intellectual capacity must be assessed for early detection of post-traumatic sequelae.

An exploratory study to assess the post-traumatic neurological status and developmental maturity of children with head injury admitted in Paediatric Surgical Ward of Safdarjung Hospital was undertaken by a group of eleven B.Sc. (Hons) Nursing Interns of RAK

College of Nursing under the guidance of Mrs. Jyoti Sarin.

Objectives of the Study

The objectives of the study were: (i) to assess the neurological status of hospitalised children with head injury; (ii) to assess the developmental maturity and intellectual capacity of children with head injury in the follow-up phase, (iii) to determine the relationship between intelligence quotient and development quotient.

The research approach adopted for the study was a descriptive survey. Total enumeration sampling technique was used. The sample comprised 30 children hospitalised with head injury.

The tools used for data collection were a structured interview schedule for collective background information and details of injury. Nursing assessment proforma comprised four sections related to Nursing observations, Paediatric Modified Glasgow Coma Scale and Vineland, Social Maturity Scale and IQ tests.

The background information and details of injury were collected by interviewing parents with structured interview schedule. Three Nursing observations including assessment of neurological status were performed within 24 hours, 48 hours and 72 hours of the head injury. Developmental maturity and intellectual capacity was assessed only once during the follow-up phase of discharged children with head injury.

The Main Findings

The major findings of the study

were as follows:

1. The maximum number of sample subjects (36.67%) were in the age group of 2-4 years and were male children (60.67%).

2. Majority of children (63.33%) sustained head injury due to fall from height and did not receive any first aid.

3. The maximum number of children had vital signs within normal range though altered vital signs were observed in terms of Hyperthermia (13.33%), Bradycardia (6.67%), Tachycardia (3.33%) and Bradypnoea (3.33%).

4. Sluggish pupillary reaction was observed in 3.33% and pupils were not reactive in 6.67% of children with head injury.

5. The associated features exhibited by children with head injury in order of prevalence were vomiting (50%), ENT bleeding (33.33%), CSF leakage (33.33%) and blackeye. (26.67%)

6. Majority of children had Glasgow Coma score between 13-15 which indicates minor head injuries.

7. The minor head injury does not have an impact on developmental maturity as evident from their development quotient.

8. Forty per cent of children with head injury exhibited behavioural deviation in the post-head injury period. Fear was the most common behavioural problem.

9. 86.67 per cent of the head injury children had average intelligence in the follow-up phase.

10. The coefficient of correlation (8.87) indicates that there is a significant positive correlation between

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development quotient and intelligence quotient.

Based on the findings, it was recommended to conduct a longitudinal study of follow up of larger sample of head injury children at regular intervals for assessment of developmental maturity and intellectual capacity.

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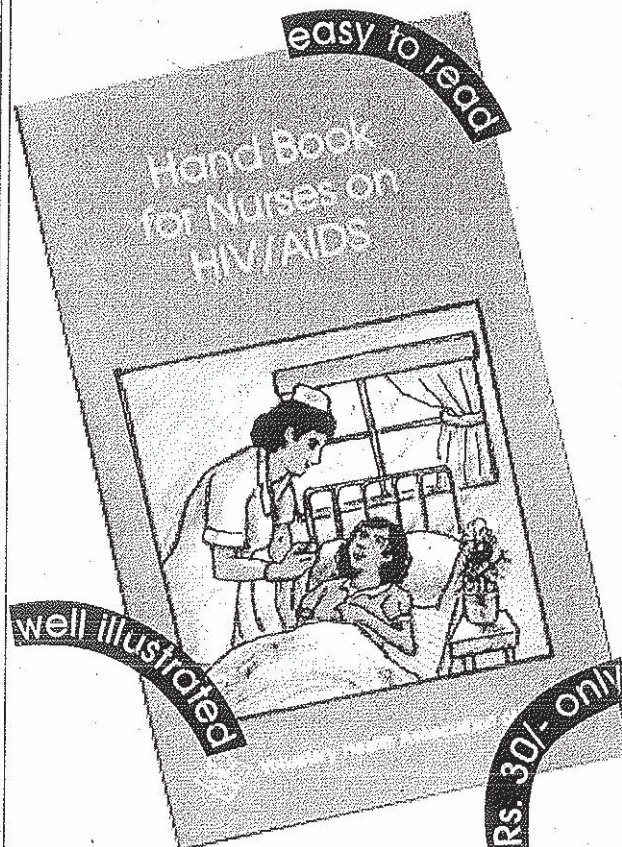
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