SAFETY PROFILE OF CHILDREN USING THE ENCLOSURE BED

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Background/Significance: Pediatric hospitals provide care to many children who have cognitive impairment due to a number of causes including autism, brain injury, developmental delay, drug overdose, seizures, and even hospitalization anxiety. Cognitive impairment can result in behavioral manifestations that can impact the safety of the child during hospitalization as the children can exhibit motor agitation, physical outbursts, wandering, confusion, and other harmful behavior. Additionally, many children who are cognitively impaired are at risk for falls, and the management of these children in the inpatient setting requires a multipronged approach. One prong has been the enclosure bed, which has been used for fall prevention, reduction in use of limb restraints, and to maintain a safe environment for the child. Although the enclosure bed is considered a restraint in the adult setting and the Federal Drug Administration (FDA) has licensed the Posey enclosure bed as a passive restraint, there is no literature that describes the use of the enclosure bed in the pediatric setting.

Purpose of the Project: This poster will describe the population of children where an enclosure bed was implemented as part of the patient plan of care. It is not clear what criteria or characteristics are used in the inpatient setting to initiate the use of the enclosure bed or the evaluation of the success or failure in managing the child’s behavior. It is unknown whether there are any complications from use of the enclosure bed. It would be important to be able to describe the use of the enclosure bed in the pediatric setting and the associated patient characteristics. This information will enhance the nursing knowledge in the care of this challenging population of children.

Sample Description/Population: The sample was 154 patients over 207 patient encounters who were admitted to a 296 bed freestanding Midwestern pediatric tertiary care hospital.

Method/Design: A retrospective descriptive chart review was completed. Variables included age, length of developmental delay, length of stay, length of bed use, use of medications to manage behavior, restraint usage during use of the enclosure bed, sitter usage during use of the enclosure bed, skin breakdown, falls, fall risk, and patient injury data if available. Nursing progress notes were examined to understand patient behavior and response while in the enclosure bed.

Results: Three groups of children emerged, those without cognitive impairment (n=16), those with new cognitive impairment, e.g. brain injury (n=27), and those with congenital cognitive impairment (n=98). Significant variables (p<.05) between the three groups included age, length of stay, use of behavioral medications, skin breakdown, and falls while the enclosure bed was in use. Non-significant variables included injury occurrence and use of a sitter among the three groups.

Conclusions: This analysis led to a review of safety issues when the enclosure bed is used, and identification of appropriate indications for use when caring for children with behavioral challenges in the non-psychiatric inpatient setting. To maintain safety, the enclosure bed is a reasonable intermediate intervention for children with fall risk and/or cognitive impairment.