Utilizing Cognitive Behavioral Therapy, Token Economy Technique to Positively Impact Boarding of Pediatric Psychiatric Patients

Purpose: Recent US data estimates 5% to 7% of pediatric ED visits are related to mental health. The most common mental disorders diagnosed in childhood are Tourette syndrome, attention-deficit/hyperactivity (ADHD), behavior, mood, anxiety, autism spectrum (AS), and substance use disorders (SUD). Between 2011 and 2015, psychiatric ED visits per 1000 youth increased by 28%. Disposition is the major issue; the wait for outpatient psychiatry is long and inpatient psychiatric beds are a limited resource. This negatively impacts patient behavior, overall ED throughput and patient/family/staff satisfaction. This ED sought to develop an evidence based, proactive, consistent approach to improving pediatric patient behavior management during prolonged boarding.

Design: Using the five-step process improvement model of define, measure, analyze, improve, and control, an interdisciplinary team developed strategies to implement the use of Cognitive Behavioral (CBT) utilizing the Token Economy (TE) technique while working with boarding pediatric patients.

Setting: Level 1 Emergency Department, Level 1 Trauma Center in an Urban Quaternary Care Teaching Hospital with 80,000 annual visits

Participants/Subjects: Emergency Medicine and Child Psychiatry Clinical Staff (Physicians, Nurses, Social Workers), Child Life Specialist (CLS), Patients, Families

Methods: Using CBT and TE concepts, a three leveled list of social/symbolic/tangible activities was created to outline consistent, appropriate, safe reward options. Behavior expectations for the child to earn "tokens" included timely completion of tasks, following directions, respecting rights/space/property, appropriate language and self-control. Staff were educated on CBT/TE and reward activities prior to implementation. Patients started with Level 1 rewards. Depending on the patient's length of stay, their ability to progress to Level 2 and 3 was re-evaluated daily.

Results/Outcomes: Demographic data from 2017/2018/2019 was reviewed. Of the 14,800 yearly pediatric visits, this ED annually cares for 600 behavioral health pediatric patients. Approximately 65% were discharged home, 5-9% were admitted to a medical inpatient unit and 30% were transferred to a pediatric inpatient psychiatry facility. The average age was 13 years; median length of stay (LOS) was 16 hours. Not infrequent, outlier LOS was 30 to 45 days. TE was softly implemented in 9/2019. A post implementation survey highlighted initial effects of TE: 40% of respondents were aware of TE initiative; 23% consistently used the technique; 64% observed others use TE; 32% felt comfortable explaining TE to patient/family; 64% felt TE was somewhat helpful in managing behavior; 19% felt that TE reduced the need to call a Behavioral Emergency Code; 46% felt TE lead to greater patient satisfaction; TE was most effective for 8-10 year olds (42%); with behavioral disorder (41%) and ADHD (21%);

least helpful with AS (28%) and SUD (22%); 89% of respondents requested more education on TE.

Implications: CBT and TE concepts are well established as effective behavioral approaches to modifying children's behaviors. This project demonstrated their application to the emergency department setting is easy to do, results in more consistent staff management of undesirable behavior, can lead to improved patient, family and staff satisfaction during long boarding times, and even with limited understanding by staff, can a have positive impact on managing pediatric patient behavior.

References;

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