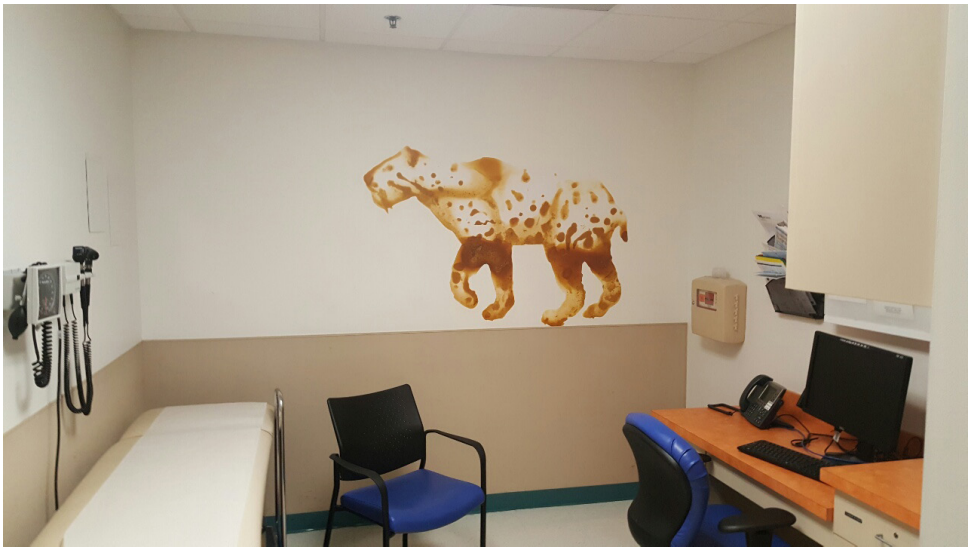
RXART



RxArt Clinical Study Abstract:
Visual Art Intervention in the Pediatric Neurology & Neurodevelopmental Disabilities Outpatient Setting

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Introduction: Children with neurological and neurodevelopmental disabilities are at increased risk for anxiety disorders. Our clinical observations suggest that installation of site specific visual art reduces fear and anxiety in pediatric patients. However, scant research to date shows that visual art in clinical environments reduces patient anxiety and perception of pain, and even less is known about the effect of visual art on easing anxiety in pediatric patients with neurological and/or neurodevelopmental conditions.

Methods: Pediatric patients with underlying neurological and/or neurodevelopmental disorders seen at the regional outpatient clinic of Children's National Health System in Rockville, Maryland were enrolled in a prospective, non-randomized study over the period of one year. Patients of comparable age and sex were placed into pre-intervention (control) and intervention groups according to the when the visual art installation was completed. Ability to obtain vital signs and their values, including heart rate and blood pressure, were recorded. Patient guardians also completed a questionnaire that included select items from the Screen for Child Anxiety Related Disorders (SCARED) to evaluate baseline anxiety symptoms, and additional questions to indicate day of clinic visit (DOV) anxiety symptoms. Using a general linear model and chi-square tests, these scores were compared between groups for statistical significance.

Results: 50 patients were each enrolled in the control and intervention groups. The most common primary medical diagnoses were attention deficit hyperactivity disorder (ADHD), 36% (18/50) in the control group and 40% (20/50) in the intervention group; autism spectrum disorder (ASD), 28% (14/50) in the control group and 34% (17/50) in the intervention group; global developmental delay (GDD) or intellectual disability (ID), 14% (7/50) in the control group and 16% (8/50) in the intervention group. There was no statistical significance in ability to obtain vital signs or vital sign values between the groups. However, in both groups, children 4 years and under were statistically less likely to have their vital signs obtained (P=<0.0001). Overall, there was no statistical significance in comparing baseline anxiety scores in each group with DOV anxiety scores. Yet when analyzed via primary diagnosis, children with GDD/ID in the intervention group statistically showed reduced anxiety scores on the DOV (P=0.0488).

Conclusions: Children with GDD/ID show reduction in anxiety symptoms with exposure to novel visual art in the outpatient clinical setting. Although patients with other neurological and neurodevelopmental disorders do not show statistical significance in reduction of anxiety symptoms, further research in this arena is recommended.

Image: RxArt installation by Alexis Rockman at Montgomery County Outpatient Center, Children's National Health System, Rockville, MD.
Photo courtesy of Gregory Staley, 2017.