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Psychotherapeutic relaxation: How it relates to levels of aggression in a school within inpatient child psychiatry A pilot study

Barbara A. Bornmann, MA, LCAT-RDT [a,*], Serge A. Mitelman, MD [a,b], Douglas A. Beer, MD [a,b]

[a] *Elmhurst Hospital Center, 79-01 Broadway, Elmhurst, NY 11373, USA*
[b] *Mount Sinai Medical Center, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029, USA*

Abstract

Aggression is one of the major reasons for inpatient hospitalization in child psychiatry. The problem of aggression faced by inpatient child psychiatry needs solutions that are practical in nature and offer an ease of implementation. In this study a psychotherapeutic relaxation group, a combination of creative arts therapy and progressive muscle relaxation, was implemented in the school setting of inpatient child psychiatry at Elmhurst Hospital Center, Queens, New York to explore the relationship between the group and aggression. The control group $N = 23$ received treatment as usual, and the experimental group $N = 25$ in addition to treatment as usual received up to 13.5 h of relaxation training. Both groups were rated daily during school hours by the Modified Overt Aggression Scale (MOAS). The experimental group demonstrated significantly lower aggression scores as measured by the MOAS. Analysis utilized a two-tailed *t*-test and univariate analysis of covariance (ANCOVA) with length of stay as a co-variate and both tests produced almost identical and significant results on total aggression scores. Along with other management techniques, a relaxation prevention program may help children manage aggressive impulses and prevent crisis situations due to aggression.

Keywords: Psychotherapeutic relaxation; Aggression; Inpatient child psychiatry; School-based violence prevention; Restraint and seclusion

The purpose of this research was to explore how the implementation of psychotherapeutic relaxation techniques relates to levels of aggression in an inpatient school setting. Aggression is a primary criteria for admission to an inpatient child psychiatric unit. Aggressive behavior, including bullying, can be demonstrated by an individual or a group, and can target an individual or a group. In addition to direct physical threats of aggressive behaviors, they generally require a victim, and victimization can have a negative impact on personality development. While there are many risk factors for aggression, Tremblay et al. (2004) reported that the risk factors associated with aggression are low IQ, hyperactivity, impulsivity, lack of empathy, and fearlessness. Children admitted as inpatients with these risk factors are more prone to demonstrate aggressive behavior that may result in injury, which makes the unit and the educational setting of inpatient child psychiatry a potentially unsafe environment. Children thrive in a safe, structured environment where parents, teachers, and therapeutic staff set appropriate limits on the child's behavior.

* Corresponding author at: Elmhurst Hospital Center, 79-01 Broadway, Elmhurst, NY 11373, USA. Tel.: +1 718 334 5650; fax: +1 718 334 1252.
E-mail address: Bborn2000@aol.com (B.A. Bornmann).

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In an effort to address the problem of aggression in an inpatient child setting a psychotherapeutic relaxation program was implemented to help children who have aggressive behavior begin to self-regulate their aggression and bullying behavior in school. Stress management has been shown to be effective in helping children with attention deficit hyperactivity disorder develop more appropriate coping strategies (Gonzales & Sellers, 2002). Progressive muscle relaxation has been proven as an effective short-term management strategy in a day school/treatment program for children with emotional or behavioral disorders (Lopata, 2003). Therefore, a psychotherapeutic relaxation program may help to provide a calm environment for children to learn self-control and enhance the educational process.

Children often arrive in an inpatient psychiatric setting demonstrating aggression either self-injurious or assaultive towards others or the environment, due to psychiatric impairment and often in the context of an unstable home environment. The root causes of aggression or the underlying clinical syndrome must be addressed in order to diminish aggression according to American Academy of Child and Adolescent Psychiatry (AACAP) Official Action (2002). Risk markers of aggression characterized in adolescent inpatient hospitalization by Day, Franklin, and Marshall (1998) were gender specific with family history of violence, ethnicity, and medication associated with girls, and conduct disorder, medication, and previous hospitalization associated with boys. Inpatient child psychiatry is an increasingly short-term, acute care setting where the goal is to stabilize the patient and discharge them to a safe environment where the patient continues to receive clinical treatment as indicated.

All children who require an acute care setting have complex lives compounded by both genetic and environmental influences. Intellectual functioning is often impaired in these children. In a meta-analysis of risk markers associated with challenging behaviors in children with intellectual deficiencies, McClintock, Hall, and Oliver (2003) found that receptive communication, expressive communication, autism, gender, and degree of intellectual deficiency (ID) were risk markers for aggression. Specifically the study revealed that self-injury was common with severe and profound ID, autism and both receptive and expressive language disorder, and aggression was common in males, autism and expressive language disorders. Many of the children admitted to our inpatient unit demonstrate intellectual deficiency, a primary risk factor, with IQ scores in the borderline or low average range. School can then become an environment for frustration and acting out behaviors.

While there exists a plethora of information on school-based violence prevention programs nationwide easily accessible on the web, our searches revealed no school-based violence prevention programs in the schools within inpatient child psychiatry. It has been shown that bullying behavior in schools can be effectively ameliorated by a school-based intervention program (Olweus, 1994). Meta-analyses of school-based violence prevention programs were assessed by Mytton, DiGuiseppi, Gough, Taylor, and Logan (2002) concluding in a modest reduction in aggressive behaviors due to violence prevention, and more recently Wilson, Lipsey, and Derzon (2003) found significant findings in favor of violence prevention programs. While these meta-analyses addressed traditional psycho-educational models, a creative arts therapy model developed by Kornblum was evaluated and revealed positive statistical results (Hervey & Kornblum, 2005). For the purpose of this study the school-based violence prevention program developed combined creative arts therapy and behavioral training which more accurately reflects treatment on the inpatient unit.

Factors in our inpatient school environment that may increase the number of aggressive episodes can be: (a) low teacher to student ratio depending on census, and (b) teaching staff not trained in de-escalation techniques or mental health issues. In an analysis comparing genetic and environmental influences of aggression, Miles and Carey (1997) discovered that environment including parents, neighborhood, and peer group are important triggers in the development of childhood aggression, but that this influence may diminish through adolescence. Therefore the school environment, which incorporates peer group exposure, parental influence, and reflects the neighborhood, has a paramount effect on the development of aggression in a child at risk for aggressive behavior.

Management strategies

Management strategies to work with patients include treating clinical syndromes with pharmacology, behavior modification, therapeutic activities, psychotherapy, staff training, and addressing staff to patient ratio. The psychotherapeutic goals may include behavioral training, symptom relief, anger management, personal growth, communication, and socialization. The unit itself provides a structured environment with a daily schedule and staff supervision. The Occupational Health and Safety Administration (OSHA) recommendations to reduce violence in psychiatric hospitals were adapted by Stevenson and Otto (1998) and suggest that the following criteria be addressed: 1. physical environment, 2. staff to patient ratio, 3. training and continuing education, 4. prediction of potential for violence, 5. program