Innovative Strength-Based Care in Child and Adolescent Inpatient Psychiatry

Deanna P. Sams, PhD, David Garrison, MD, and Joanne Bartlett, MS, RN, PMHNP-BC

Deanna P. Sams, PhD, is Assistant Professor of Psychiatry (Psychology); David Garrison, MD, is Associate Professor of Psychiatry; Joanne Bartlett, MS, RN, PMHNP-BC, is Senior Nurse Manager Child and Adolescent Psychiatry, Department of Psychiatry, University of Rochester Medical Center, Rochester, New York

**PROBLEM:** Child and adolescent psychiatric units serve the highest risk, most vulnerable populations in the mental health delivery system. This article describes the integration of a strength-based approach with a traditional, medical model of psychiatric care on an acute inpatient unit. A strength-based framework allows for increased focus on exploring patients’ goals, strengths, relationships, skills, and family communication within the hospital setting.

**METHODS:** The process of integration of strength-based care is described, followed by discussion of the implementation and evaluation of interventions, including mindfulness, family movie, narrative, and animal-assisted therapies.

**FINDINGS:** Innovative interventions led to improvement in patient symptoms, unit culture, and patient, family, and staff satisfaction.

**CONCLUSION:** A strong emphasis on strength-based, multidisciplinary treatment has enhanced patient care, as the goals of acute inpatient admission are broadened to include more than diagnosis and medication management.

Strength-based care (e.g., Laursen, 2003; Saleebey, 2002) is founded on the premise that a person’s skills, interests, and support systems are vital to developing an effective treatment plan. Simply, strength-based care strives to “identify what is going well, do more of it, and build on it” (Barwick, 2004). With this commitment to exploring strengths, alliance with the patient and the patient’s self-confidence are enhanced, both of which are essential in working together toward solving the problems that have led to a psychiatric crisis. This approach is especially crucial in child and adolescent inpatient psychiatry, which serves the highest risk, most vulnerable populations in the mental health delivery system. In this setting, a strength-based assessment is vital to bring alliance and confidence within the family to persevere through the crisis after hospitalization.

This article describes an acute, child and adolescent inpatient unit’s integration of a strength-based approach with a traditional, medical model of psychiatric care. This framework allows for increased focus on exploring patient’s goals, strengths, relationships, skills, and family communication within the hospital setting. The integration of strength-based care is described, followed by discussion of the implementation and evaluation of interventions that subsequently emerged. Mindfulness groups, the most prominent of the interventions, are discussed in detail, followed by three other interventions also in progress. Table 1 includes a summary of these and other interventions that have been utilized. Finally, the impact on strength-based care on staff satisfaction is discussed.

**The Child and Adolescent Inpatient Unit at the University of Rochester Medical Center**

The 24-bed Child and Adolescent Psychiatric Inpatient Unit (CAPIU) serves children and adolescents ages 5–18 years and embraces a multidisciplinary strength-based approach to treatment. A structured treatment program is designed to meet the social, emotional, psychological, and academic needs of patients. Program elements have been carefully designed to help patients learn distress tolerance and emotion regulation skills, distraction activities, relaxation and mindfulness techniques, social skills, and recovery strategies. Goals also include improved family communication with a focus on helping the family recognize strengths and validate the patient’s feelings and experiences.

The CAPIU’s multidisciplinary team consists of psychiatrists, psychologists, trainees (psychiatry, psychology, nursing, and social work), nurse practitioners, master’s-level social workers, registered nurses, milieu counselors (“Psychiatric Technicians”), and activity therapists. In addition,
Rochester City School District Teachers are integral members of the team and provide daily instruction for patients and helping to promote successful reintegration into school.

**Emergence of Strength-Based Care on the CAPIU**

**Therapy Modules**

The development of cognitive-behavior–based therapy modules in 2005 reflected the CAPIU leadership team’s decision to challenge the traditional model of psychiatric hospitalization, which focuses primarily on DSM diagnosis and crisis stabilization largely via medication management (American Psychiatric Association, 2000). In a collaborative effort between nursing, psychology, and psychiatry, CBT-based psychoeducational and skills-based worksheets were developed. Staff supplements also assisted nursing staff to coach patients as they work through the packets.

The implementation of therapy modules on the CAPIU reinforced the idea that short-term inpatient units can provide more than stabilization and medication management by implementing psychotherapeutic treatments as well. The multidisciplinary appreciation of a short-term psychotherapeutic intervention served as a catalyst for the broader culture change that followed.

**Collaborative Problem Solving**

In 2006, the CAPIU implemented the principles of a cognitive-behavioral model now known as Collaborative and Proactive Solutions (Greene, Albon, & Goring, 2003; formerly Collaborative Problem Solving). This paradigm shift aimed to provide more humane, trauma-sensitive treatment. While structure and consistency is always provided, the core values on the CAPIU have broadened to embrace nurturing and a nonpunitive milieu based on teaching and learning.

Collaborative and Proactive Solutions (CPS) is a family-centered intervention based on the assumption that “children do well if they can,” (Greene et al., 2003). The model purports that difficult children lack cognitive skills necessary to manage frustration and master situations that require flexibility and adaptability; as such, key components of this approach include identification of lagging skills, proactive attention to situations, which may lead to challenging behavior, and an invitation to develop mutually satisfactory solutions.

Modeled after the implementation of CPS on a child psychiatric unit in Cambridge, Massachusetts (Hassuk & Regan,
In 2003, the CAPIU began formal didactic training, weekly team consultation meetings, and real-time, and in vivo coaching and mentoring by clinical leadership. Over time, nursing staff and clinicians began to demonstrate greater empathy, teach collaborative skills, and seek mutually beneficial solutions with patients. This is in contrast to the more traditional behavioral approach previously utilized, which assigned rewards and consequences based on patients’ behavior and often led to increased conflict between patients and staff. During the initial implementation phase of CPS, parents and patients reported positive impressions about the admission, including trust in nursing and clinical staff, being treated respectfully, and staff flexibility and collaboration.

In addition to the improved culture of empathy and understanding, an important positive outcome of the implementation of CPS was a significant reduction in the likelihood of a patient being involved in a physical hold, when compared with hold rates prior to CPS (Sams, Alpert-Gillis, Garrison, Bartlett, & Kellogg, 2009). More recently, a 75% reduction in total hours of seclusion and restraint was noted over the course of 1-year following the implementation of our strength-based focused program revisions (University of Rochester Department of Psychiatry Quarterly Seclusion and Restraint Data Report, 2015). In 2008, the CAPIU’s transformation was recognized by the University with the Meliora Award, an honor awarded to an interdisciplinary team who exemplifies collaboration, innovation, and program enhancement.

**Innovative Interventions for Children and Adolescents**

As the culture on the CAPIU continued to shift from traditional behavioral modification and medication management to strength-based care, several multidisciplinary interventions emerged. Over time, these innovations, often led by nursing staff, have become ingrained into our unit’s flow and culture, serving to enhance standard inpatient psychiatric treatment. The pilot evaluations described below were conducted as part of the CAPIU’s ongoing quality improvement initiatives. As such, data were collected anonymously and subsequently approved by the university’s Institutional Review Board.

**Mindfulness Groups**

The use of mindfulness-based interventions in the treatment of psychiatric disorders has grown rapidly in recent years. Mindfulness is described as the practice of directing attention to one’s internal thoughts, emotions, and bodily sensations through observation without judgment (Kabat-Zinn, 1990). Mindfulness practice seeks to cultivate a nonjudgmental awareness to the present moment, which has been shown to have positive effects on both psychological and physical well-being (Baer, 2003). For example, the practice of mindfulness has been integrated into the treatment of anxiety (Hoffmann, Sawyer, Witt, & Oh, 2010), depression (Hoffmann et al., 2010), psychosis (Bach & Hayes, 2002), and trauma (Follette, Palm, & Pearson, 2006). While research on the therapeutic benefits of mindfulness exist within adult populations (see Baer, 2003 for a review) only emerging empirical evidence exists to demonstrate the benefit of such practices in the treatment of adolescents (e.g., Thompson & Gauntlett-Gilbert, 2008).

The iMATTER Group (Improve Mindful Attention, Enhance Relaxation) is a manualized, mindfulness-based program designed to increase the use of such skills with adolescents. The iMATTER manual was developed by the unit’s psychologist, psychology trainees, and nursing leadership specifically for use on the CAPIU. The manual was based on a compilation of sources (e.g., Germer, 2009; Hanh, 2010, 2011; Hayes, 2005; Murray, 2012) and aims to provide adolescents on the CAPIU an opportunity to learn and practice relaxation strategies, mindfulness exercises, and simple yoga poses. The iMATTER protocol included several possible activities within each of the following group segments: (a) Mindfulness Meditation, (b) Mindful Movements (simple yoga poses), (c) Mindfulness Activity (e.g., mindful eating, mindful walking), (d) Breathing Exercise, and (e) Closing Activity. Groups are facilitated by the unit psychologist and/or predoctoral psychology interns. The group room is designed to promote calm and relaxation, using dimmed lights, soothing scents, and quiet, relaxing music.

**Evaluation**

As part of the CAPIU’s ongoing quality improvement projects, a pilot project was undertaken in 2013–2014 to evaluate the feasibility and effectiveness of the iMATTER group with adolescent patients (ages 13–18) on the CAPIU. This study aimed to assess (a) the feasibility and effectiveness of the iMATTER group on a short-term acute psychiatric unit and (b) assess the impact of the group on participants’ self-reported mood state pre- and postgroup participation.

Results indicated that following participation in an iMATTER group, participants (n = 188) reported a significant improvement in self-reported mood (Sams et al., 2015). Given these encouraging preliminary findings, a larger-scale study was developed. Following IRB approval, willing patients provided assent and their parents provided consent to participate in the study.

In addition to replicating pilot study findings of improved mood, the iMATTER study aimed to assess whether benefits of the group would be evident in physiological state (i.e., heart rate and blood pressure), mindfulness skill acquisition, and whether participant attributes (age, gender, number of
prior admissions, and diagnostic category) would moderate self-reported mood and heart rate/blood pressure.

**Method**

**Participants**

Seventy-one adolescents (76% female, 24% male) between the ages of 13 and 18 years consented to participate in the iMATTER study. The majority of participants had a primary DSM diagnosis of a depressive disorder (61%), followed by bipolar spectrum disorders (22%). The majority of participants (66%) had no prior admissions to the CAPIU.

**Procedures**

Before and after each group session, consented participants’ blood pressure and heart rate were recorded using the standard cuff on the Dynamap machine. They also completed the self-report questionnaires to assess mood state before and after each session. Participants attending their first iMATTER group completed a scale designed to assess mindfulness skills.

**Measures**

The Profile of Mood States—2nd Edition Youth Short Form (POMS 2-Y Short; Heuchert & McNair, 2012) is a 35-item self-report measure used to assess mood state in adolescents from 13 to 17 years of age. The measure has established research utility and is based on large normative samples representative of the U.S. population. Internal consistency for the POMS 2-Y Short ranged from 0.82 to 0.95. The short version of the POMS is particularly well suited for multiple administrations, for example, when monitoring and evaluating treatment programs. The questionnaire contains 35 items and has an estimated completion time of 3–5 min. It provides the following subscale scores: Anger–Hostility, Confusion–Bewilderment, Depression–Dejection, Fatigue–Inertia, Tension–Anxiety, and Vigor–Activity, and an overall mood score (Total Mood Disturbance). An additional subscale, Friendliness, is not included in the Total Mood Disturbance score and was not expected to be impacted by a mindfulness intervention. During the pilot study, a factor analysis determined that the POMS factor structure was stable after removing the friendliness subscale. This scale was therefore excluded from the present study.

The Mindfulness Attention Awareness Scale—Adolescent (MAAS-A; Brown & Ryan, 2003) is a 14-item measure adapted for use with adolescents. Participants complete this measure immediately before their first iMATTER group and then again at the time of discharge from the CAPIU. The MAAS-A assesses core characteristics of mindfulness including receptive awareness of and attention to what is taking place in the present. An example item includes “I tend not to notice feelings of physical tension or discomfort until they really grab by my attention.” Items are rated on a Likert scale from 1 (almost always) to 6 (almost never), with a higher score reflecting more mindful traits.

**Results**

Preliminary results from this expanded project (n = 71) replicated the pilot findings that mood state improved significantly following group sessions (Figure 1) and also found that participants’ heart rate significantly decreased after group participation (Figure 2) across diagnostic category, number of admissions, age, and gender (Sams & Alpert-Gillis, 2015). More detailed results are included in Sams and Alpert-Gillis (2016).
Family Movie Therapy Exercise

Family involvement may be the most important predictor of successful psychiatric hospitalization of adolescents (e.g., Green et al., 2001; King, Hovey, Brand, & Wilson, 1997). There is also a growing body of literature that describes the use of movies as a catalyst to engage patients in highly stressful topics (e.g., Lampropoulos, Kazantzis, & Deane, 2004). The Family Movie Therapy Exercise (Garrison, 2007) uses engaging movies as a therapeutic prompt to generate discussion of important, often high stress topics and facilitate improved communication skills among family members. Goals of the exercise include improvement of communication skills, such as reflective listening and validation and application of the prescribed movie to the family’s own unique crisis.

The Family Movie Therapy Exercise was offered to adolescent patients and their families while admitted to the CAPIU. Upon initial assessment by their primary treatment team, patients were “prescribed” a movie to watch together with their family/primary caregiver. Discussion questions specific to each movie were completed in writing independently by each family member. Families then meet with a therapist (predoctoral psychology intern or psychiatry resident/fellow) for a 60–90-min session to process their answers and practice communication skills.

Evaluation

To examine the feasibility of the exercise on an acute inpatient psychiatric unit, a pilot study was developed. Patient and family perceptions of and satisfaction with the intervention were assessed via brief surveys following the session. Further, this project sought to examine the impact of the Family Movie Therapy Exercise on family communication skills.

After the session, 27 adolescent patients and their families completed brief, anonymous surveys. Results indicate that while all participants found it moderately helpful, parents and caregivers found the exercise more helpful than the patients or siblings (Garrison & Sams, 2015). However, implications of these findings are limited by the small sample size and lack of control group. A larger sample size would allow for more detailed analyses, such as assessing the possible impact of specific movie watched. The CAPIU plans to continue to use the Family Movie Therapy Exercise as an optional intervention for adolescent patients and their families, with a member of the core treatment team facilitating the sessions.

Animal-Assisted Therapy: Therapy Dog Visits

It is increasingly known that animals can have a positive impact on individuals’ well-being. The use of animal-assisted therapy is growing in a variety of settings. Animal-assisted therapy “utilizes trained animals (often dogs) and handlers to achieve specific physical, social, cognitive, and emotional goals with patients” (Longe, 2005). For over 5 years, the CAPIU has utilized volunteer therapy dog–owner teams to engage patients in the milieu. Volunteers are selected through the University of Rochester Medical Center’s established volunteer organization. All volunteers undergo an interview and a background check. Orientation and training regarding hospital policies and procedures, including maintaining the confidentiality of protected health information is required, including a written confidentiality agreement. Further, therapy dog teams must be certified by Therapy Dogs International, an organization which trains, evaluates, and registers therapy dogs and their handlers, ensuring dogs meet standards for skills and behavior.

Therapy dog teams facilitate a weekly, 1-hr group session in which patients learn more about and interact with the dog while being guided by the owner. Sessions begin with introductions and gathering information about each patient’s comfort level with dogs. The majority of the session is spent with patients sitting on the floor petting the dogs or watching them perform tricks. Patients are also able to ask the handlers questions about their therapy dogs and talk about their own dogs.

Evaluation

The impact of therapy dog visitation on the mood states and blood pressure of children and adolescents on the inpatient unit was assessed in 2014. Participants completed anonymous mood state assessments before and after each group session and also had their blood pressure recorded as part of their daily vital sign checks. A brief qualitative questionnaire was also given to patients after the group to assess their perceptions of the therapy dog visits. Results indicate that there was marked improvement in participants’ mood states and reduction in blood pressure as a following AAT groups. Additionally, a vast majority of patients found the therapy dog visits to be helpful (Alpert-Gillis & Sams, 2015).

Narrative Therapy

Developed with the principles of narrative medicine (Charon, 2001) and narrative therapy (White & Epston, 2001), the Narrative Therapy Exercise challenges the clinician to create a hopeful, but accurate, narrative as they gather a personal and strength-based story, than the DSM-V (2015) or ICD-10 (2015) based medical assessment. Through this narrative lens, the clinician cannot help but engage patients with more empathy and creativity, a contrast to the categorical approach to assessment that focuses on problems and defects. The narrative is written for the patient but also with encouragement from the outset to share this narrative with the family as well. As a result, the clinician “ghost writer” has the challenge of creating a strength-based narrative that will unite the different perspectives of the patient and
family. The Narrative Therapy Exercise is adapted from a similar exercise that has been in place in the medical student psychiatry clerkship at URMC (Garrison, Lyness, Frank, & Epstein, 2011), but with an important modification to make it more useful for the child and adolescent population.

After a patient has been identified by his or her treatment team as likely to benefit from a Narrative Therapy Exercise, (approximately 25% of patients), a psychology intern, medical student, or psychiatry resident meets with the patient to gather the information to write the narrative (usually between one and two sessions of 1–2 hr each). After review by the patient’s primary team, the narrative is shared with the patient, with an opportunity for revisions and feedback to be made in the context of therapeutic reflection and processing. The patient is then strongly encouraged to share the narrative in a family session, where the trainee and primary team member work collaboratively to highlight the strength-based themes. As such, the clinician facilitates a family therapy session in which the patient (or clinician, if the patient chooses) reads thenarrativetotheirfamilyandhastheoften powerful experience of processing the reactions, emotions, and perspectives of the others in the room.

Evaluation

As part of the CAPIU’s ongoing quality improvement efforts and to evaluate the impact of the Narrative Therapy Exercise, an evaluation was conducted. The program evaluation aims to assess two factors thought to be most crucial in a successful hospitalization: family communication and hope. Assessments were completed anonymously by patients before and after the narrative process. Measures used included the Parent–Adolescent Communication Scale (Barnes & Olson, 1982) and the Hopelessness Scale for Children (Kazdin, Rodgers, & Clobus, 1986). Participants were willing children and adolescents referred for narrative therapy by their treatment teams on the inpatient unit. A total of 39 patients were assessed, ages 12–18 years (mean = 15.46), 30 of whom were females (76.9%). Thirty participants completed pre- and post-assessments of Hopelessness, 27 participants completed pre- and post-assessments of Parent–Adolescent Communication with Mother, 23 participants completed pre- and post-assessments of Parent–Adolescent Communication with Father, and nine patients did not complete post-assessments. Results indicate significant (p < .05) decrease in Hopelessness after the narrative process. There was not a significant change in Parent–Adolescent communication. Over half (56%) of the children chose to share their narratives in a family meeting (Ghannadapour & Sams, 2016).

These findings indicate that a significant decrease in self-reported hopelessness was found after completing the narrative process. Given that almost half of the adolescents chose not to share their narratives in a family meeting, it may be that the act of creating the narrative, regardless of whether it is shared, can help decrease hopelessness.

Discussion

Throughout the process of innovative change and through active commitment to multidisciplinary teamwork and staff empowerment, patients and families admitted to the CAPIU benefit from the numerous strength-based interventions throughout their short stay. As a result, preliminary evaluations indicate that family and patient outcomes (e.g., communication, mood state, and hopefulness) were achieved.

In addition to improvement in patient and family treatment, several important quality and safety outcomes were also attained. First, patients and families reported overall improvement in satisfaction, perception of safety on the unit, helpfulness of group therapy, and involvement in decisions regarding their care. The strength-based interventions offered during admission introduce coping skills and improve family understanding and communication. This then allows for an increased focus on rapid re-integration into family and school life and ongoing outpatient psychotherapy.

Nursing staff are highly satisfied when they are able to engage therapeutically in strength-based treatment with their patients and effect positive therapeutic gains. A hospital survey of CAPIU staff satisfaction revealed a satisfaction score of 100%, compared with a hospital mean of 89% (Press Ganey Associates, 2005). Other outcomes related to having highly satisfied staff are low staff vacancy rates and high staff retention. In addition, the CAPIU was given the hospital’s highest staff engagement and satisfaction level, noting that the unit serves as exemplary in our department for strength-based care and dynamically engaged staff. The CAPIU’s score of 4.67 out of 5.00 (Press Ganey Associates, 2005) indicates that nurses feel connected to the CAPIU, their supervisor, and colleagues.

Finally, unit nursing staff reports a high degree of readiness to engage in feedback and action planning, representing readiness to engage in continuous improvement (Press Ganey Associates, 2005). These important outcomes, in part consequences of strength-based care, enhanced the strengths of our staff and unit paralleling the positive impact on patients and families.

The strength-based model on the CAPIU continues to be refined, with several innovative interventions in current development. First, the use of decaffeinated herbal green tea, speculated to have anxiolytic properties, is being used for anxiety reduction in adolescent patients. Efficacy data will include comparison to the effect of tea to commonly used antihistamine medications, such as hydroxyzine, for anxiety reduction. Other nonpharmacological interventions, such as the use of dawn simulators, music therapy, and exercise, are
also in development. These innovations promote patient engagement in treatment, self-regulation, and the development of coping skills that can be applied postdischarge.

Conclusion
The emergence of innovative, strength-based interventions on the CAPIU has led to significant culture change and positive outcomes for patients, families, and nursing staff. Our strong emphasis on multidisciplinary collaboration has enhanced patient care, as we broaden the goals of acute inpatient admission to include more than diagnosis and medication management. Through this lens, clinicians and nurses engage patients with more empathy, creativity, and hope.

References


