



**Redefining Residential:
Towards Rational Use of Psychotropic Medication**
Adopted January, 2014

This is the eleventh in a series of papers issued by the Association of Children's Residential Centers (ACRC) regarding key issues faced by the field in response to emerging research, policy, and best practice. ACRC is the longest-standing national association focused exclusively on the needs of children who access residential treatment, and their families. Over the past several years, ACRC has engaged with national policy makers, family members, youth, and its membership in an effort to redefine the shape and scope of residential treatment as an intervention for youth with serious emotional and behavioral disorders and their families.

This paper builds on the previous papers in the Redefining Residential Series to address psychotropic medication use in residential treatment. It briefly: reviews the evidence for use of psychotropic medication with children and youth and the complications presented by youth typically served in residential centers; identifies several critical practices residential programs should consider implementing; discusses barriers; and calls for an increased emphasis on what is described as rational use of psychotropic medications, prescribed in conjunction with other treatment modalities and careful monitoring of progress and outcomes.

Current Evidence Base

While gains have been made in the last decade establishing the evidence base for some psychotropic medications for certain psychiatric conditions, important gaps in the evidence base remain (Jensen *et al.*, 1999; McClellan & Werry, 2003; Vitiello, 2007). On the one hand, over several decades, particularly in adults, a number of psychiatric medications have shown efficacy in the treatment of diverse disorders including ADHD, depression, anxiety, autism, schizophrenia, bipolar disorder, and OCD. On the other hand, evidence for children is far more limited, and many medications have been used with children based on "downward extension" of adult studies, rather than from well-controlled studies in the pediatric population. Pediatric studies that have occurred sometimes provide different or more complex results than adult studies. There is further divergence from the evidence base for children in residential treatment, since most evidence for psychotropics is based on well-defined, homogenous populations of individuals in community settings. Finally, there is scant evidence in adults or children for specific combinations of psychotropic medications used together or for the use of multiple medications ("polypharmacy") (Chen *et al.*, 2011, Jureidini, Tonkin, & Jureidini, 2013).

While non-pharmacological treatments exist for many psychiatric diagnoses, children (and adults) are often treated with medications as a first line, and in many cases, as a sole treatment modality (Rapoport, 2013). Important disparities also exist due to socioeconomic factors, many of which bias the youth who are likely to receive residential treatment to higher rates of medication. Specifically, some studies have shown strong effects of funding source on decisions to prescribe or not prescribe psychotropic medication, with higher prescription rates to youth receiving services via Medicaid (Goodwin *et al.*, 2001). Other studies have suggested higher rates of psychotropic prescription to youth in rural settings (Segool *et al.*, 2013).

For youth served in residential programs, the evidence base is further complicated due to the complexity of their circumstances (Handwerk *et al.*, 2008). Presenting issues typically include a large number of prior traumatic or stressful events, multiple situational factors contributing to emotional distress, and a range of disruptive behaviors. The youth frequently meet criteria for more than one diagnosis without a good fit to the “classic” symptoms of any one disorder. Their prior history often includes chaotic and unstable circumstances, an increasing cascade of interventions with several care providers, and poor transfer of diagnostic and treatment information. It is not atypical for them to be taking multiple psychotropic medications at the time of admission, before even seeing a residential program psychiatrist. Then, even as this prescribing clinician is making medication decisions, the youth is experiencing a dramatic environmental impact by virtue of entering residential care, as well as simultaneously starting other therapies. Thus, the residential psychiatrist is often placed in the position of addressing aspects of a complex problem, with many preexisting and concurrent dynamics, and of necessity taking a trial-and-error approach.

Practice Implications for Residential Treatment

Given these concerns, some clinicians and residential leaders may be tempted to “throw their hands up” and dispense with psychotropic use altogether for youth in residential treatment programs. Others may seriously underestimate the extent to which youth receiving residential treatment may actually be able to achieve treatment goals via other means, such as skill development or participation in behavioral therapies. It is a challenge for residential, clinical, and medical staff to reconcile their desire for the best care and the least likelihood of harm, with the complexity of the clinical picture and the lack of a strong evidence base for psychotropic medications for children particularly in the face of pressure from parents and guardians to use medication for immediate stabilization.

Nonetheless, a residential intervention affords an opportunity to create a “holding” environment in which a psychiatrist can partner with families, youth, and staff to establish a more coherent understanding of the child’s needs and the indications for medication. What is most important is that this occur through a “rational approach” that recognizes the value and, in some cases, necessity or even urgency of medication, but does not view its use in isolation or as appropriate treatment in and of itself. This approach involves a mindset of not expecting psychotropic medications to “cure” the complex conditions of children seen in residential settings, and a realistic understanding of the extent to which psychotropic medications can be expected to reliably influence youth outcomes.

The following are key practices that comprise a rational approach to psychotropic medication usage. These mirror recommendations made to the broader child psychiatry community as called for by the AACAP [*Practice the Parameter on the Use of Psychotropic Medications in Children and Adolescents*](#), but also align with the National Building Bridges Initiative to identify salient factors specific to psychotropic use in residential interventions. While there are differing roles that psychiatrists can take on residential teams, the active involvement of and partnership with youth and families within a child and family team structure is key to effective implementation of these practices.

Assessment, Diagnosis, and Treatment Planning: Accurate assessment and diagnosis is critical in process used to select medication interventions. Some important considerations:

- The youth’s presentation at admission may vary from that which is reported in the record. It is important for the assessment process to incorporate a thorough understanding of the child’s historical patterns and changing presentation over time. It should include sensitivity to cultural, socioeconomic, and other psychosocial variables and reflect awareness that underprivileged children may be likely to have received more severe diagnoses and to have been more heavily medicated compared to children from more privileged backgrounds with the same symptoms. Some diagnoses or symptom patterns may even be “functional” responses to environmental contingencies.
- Assessment should include awareness of the role of adverse experiences and trauma and their neurobiological impact on the child’s development in arriving at the diagnostic formulation and determining psychopharmacologic treatment (Anda *et al.*, 2006). Symptom manifestations

of adverse childhood experiences often resemble disorders characterized by behavioral and/or emotional dysregulation, and the focus of treatment can be quite different with accurate recognition of overwhelming stress and trauma in the history.

- Due to the complex history of youth in residential programs, providers may wish to consider a careful tapering of psychotropic medications early in the assessment process to allow for accurate differential diagnosis as well as for identifying multi-disciplinary approaches to help the youth develop self-soothing and coping skills.
- Medication choice should be informed by such thorough assessment, with consideration of the existing evidence for psychotropic use, and the knowledge that long term impacts haven't been identified. On-going reevaluation of the clinical formulation while monitoring response to treatment will lead to a refinement of the diagnostic picture over time, yielding a more complete understanding of the child than a static depiction formed at admission.
- A holistic approach to addressing presenting problems should be developed through family driven, youth guided, person-centered planning, in which the prescribing physician, child/youth, family, staff and others all have equal input into the treatment planning (McConnell & Taglione, 2012). Psychotropic use should be regarded as one option within a constellation of clinical strategies that can improve the youth's functioning and outcome. It is important to avoid a pharmacological vs. non-pharmacological dichotomy, which may unintentionally ascribe greater importance to psychotropic medications over other therapies or vice versa.
- Youth and families should be fully involved in making and supporting both pharmacological and non-pharmacological treatment decisions, It is critical that youth and families are provided psychoeducation regarding medication, that their attitudes towards and beliefs about medications are respected, and that open dialog is encouraged. Youth responses to medication will be variable (Foltz & Huefner, 2013), including over and/or under reporting of benefits and side-effects, medication refusal, fear of sacrificing locus of control, seeing medication as a way to fix the problem, and reduced investment in learning new ways of managing frustration, disappointment, and anger. Family members may have a similar range of hopes and fears about medication. By incorporating youth and family perspectives and achieving agreement between the youth, family, prescribing clinician, and team, treatment engagement and resulting outcomes will be optimized.
- When a youth and/or family feels uncomfortable or opposes use of psychotropics, they should not be forced. Subtle or overt pressure is contrary to trauma-informed care. Instead, adequate support and monitoring should be provided for youth and families interested in reducing dosage levels or numbers of medication. Youth or families self-advocacy for goals such as reducing or tapering of medication usage should be taken seriously, with dialogue between the clinician and youth/family to explore how they can be pursued collaboratively

Medication Management, Monitoring, and Quality Improvement: Prescribing clinicians must carefully weigh the potential benefits and risks of medication class, dosage, and polypharmacy, all of which can increase the likelihood of iatrogenic effects.

- Wherever possible, minimizing medication use to the lowest effective dose and fewest number of medications should be the goal. Programs may wish to work in partnership with their prescribing providers to create formal protocols that require review or justification of some instances of increased medication, in order to ensure that risks are being adequately considered and that lower-risk alternatives, such as skills focused, sensory, family or peer support interventions have been ruled out before more medications are added.
- Rational use of medication also must attend to duration of psychotropic treatment. Longer-term treatment regimens are sometimes utilized based on research of short-term outcomes, despite emerging evidence of potential risks of such sustained usage on the developing brain

and body, for example increased risk of obesity and cardiovascular and endocrine abnormalities in chronic antipsychotic usage, (Anda et al., 2006).

- Careful monitoring of the impact of medication trials will improve outcomes. Improvements in clinical informatics will facilitate evaluation of off-label medication usage, non-standard dosing, polypharmacy, and the effectiveness of psychotropic medications. Program monitoring protocols can assess type, number, dosage, duration, use rates, and side-effects. Additional monitoring practices include automatic review and engagement for “outlier” prescribing patterns, and the degree to which alternatives were considered or rejected prior to certain higher-risk prescribing actions.
- Integrating tools and processes to improve the quality of medication practices with the other aspects of quality improvement will yield data that can be used to assess progress and yield practice improvements. Residential leaders may wish to consider incorporating this data into dashboards, reports to the community, information provided to parents and youth about the program or other high-visibility venues. This will have the important impact of setting a tone within the program and beyond that quality concerns related to medication practice are at least as important as any other aspect of quality improvement.
- A system for clear and consistent communication of favorable, insignificant, or adverse responses to medication trials to the youth and family, and all involved team members is critical, particularly given the number of individuals involved in the child’s care and treatment, and the concomitant risk of communication breakdowns. Training regarding psychotropic medication for employees at all levels, youth, families, advocates, funders, and external stakeholders will develop understanding of both reasonable expectations and limitations to psychotropic medication use, as well as the range of potential adverse effects, and will elevate the perceived and actual importance of monitoring and communicating regarding medication response, drug interactions, etc. Clear and effective processes for communicating medication response to the prescribing clinician are necessary for them to perform their role in management of the medications.

Developmental Context and Discharge Planning: Ongoing assessment processes should differentiate the developmental changes the youth may be experiencing.

- Youth change over time in response to their ongoing experience. Behaviors that may be considered maladaptive at one age may be developmentally normal at another, which will influence medication decision making. Development of resiliency, executive functions, and coping abilities will result from treatment or simply maturation, and medications that are “necessary” early in an episode of care may need to be reconsidered periodically.
- Discharge and transition planning must minimize post-discharge instability in medication, take into account reasonable ability of the post-discharge setting to support medication adherence, and address how post-discharge monitoring and revisions of psychotropic regimens will occur. It is critical to collaborate actively with youth, family, caregivers, and community providers while also building new partnerships and improving effectiveness of communication between settings, in order to reduce adverse events and the potential need for readmission.

Collaboration and Innovation: Psychiatrists and other prescribing practitioners who work in youth residential treatment settings should not operate in a “vacuum.”

- The effort to carefully customize and monitor the use of psychotropic prescription and management in residential programs will be strengthened, and outcomes improved, to the degree practitioners maintain connections and collaborations with inpatient and outpatient clinicians. This allows for better bilateral communication of lessons learned and improvements in both residentially focused and traditional in-/outpatient psychiatry. Indeed, most youth admitted to residential programs have been previously seen in other care settings, and in most

cases, it is a goal of the program to ultimately help them return to their home and community, frequently back to the same or similar service providers.

- Likewise, physician leaders and administrators of residential treatment centers may wish to explore opportunities to join consortiums or otherwise engage in providing training opportunities that can prepare future psychiatrists with experience relevant to residential interventions. Collaborations with research institution partners can develop or enhance an evidence base for psychotropic medication use in residential treatment, and improve diagnostic and clinical understanding.
- Such efforts would lead to advocacy and knowledge dissemination that would improve the broader system of care, increase community understanding and acceptance, and foster greater well being for the youth and families being served and supported. Residential treatment centers can better advocate on the local, state, and/or national level regarding the concerns of youth in their care, including broader adoption of best medication practices.

Overcoming Barriers

It is difficult to implement changes in treatment practices and processes, and team members may resist change due to the perception that changes may limit their clinical options. Program staff may feel that medications that would help manage difficult behavior is being arbitrarily withheld. Prescribing clinicians and administrators may be uncomfortable with monitoring and oversight of medication practices, which may feel burdensome and an unwarranted intrusion into independent practice. Youth and family members may be confused by the different approach from that which they've experienced or by the ambiguity involved in the careful evaluation of medication regimens.

Team members may be better able to embrace the challenge of addressing these barriers if they remember an important point made by the World Health Organization – that health depends on the presence of wellbeing and not only the absence or management of disease. A rational approach to the use of psychotropic medication can stimulate a focus on strengths and needs and allow the team to pursue the overarching goal of child/youth wellness that is really everyone's objective. Doing so will likely also promote increased use of family-driven and youth-guided practice and facilitate youth and families in becoming much more able to see themselves as agents of their own change as opposed to their relatively passive role in the traditional medication compliance regimen. Finally, and not to be understated, the resulting improvements in quality of care will improve outcomes.

Realizing this promise will involve developing physician leaders who believe in this approach and can influence their peers towards rational psychotropic medication use. It will be important for other leaders, including administrators, clinicians, and advocates, to actively engage physicians and other prescribing practitioners in understanding the rationale for these practices and how they support shared treatment goals. Comprehensive training in emerging best practices in residential interventions will also facilitate this change.

Many topics previously discussed in this series of "Redefining Residential" papers may serve as catalysts for embracing rational psychotropic use. Pursuit and adoption of these other recommendations may make it easier and more natural to adopt the practices identified above. This includes previous statements ACRC has made about building cultures that see the dangers in restraint and seclusion; broadly embracing evidence-based practice; creating non-coercive and trauma-informed environments; valuing formal assessment and monitoring of outcomes and quality indicators; refining the notion of diagnosis and treatment planning in the context of the youth we serve (many of whom may have complex trauma histories); and broadening the notion of the treatment team to include the youth and family as equal partners. On the other hand, embracing rational psychotropic use may itself serve as a catalyst for making these other changes. Thus, there is no linear or sequential pathway in which these advances should be made, but making them is critical.

Conclusion

Within the context of the service and support options provided by the residential programs, psychotropic medications are critical. They can assist in the treatment of psychiatric disorders and help both children/youth and adults maintain personal safety, improve quality of life, and increase the efficacy of other non-pharmacological interventions. At the same time, it is vital that they be used in a way that is based on available relevant evidence, guided by accurate diagnosis and treatment planning, and as an integrated component of a system of care, alongside non-pharmacological interventions such as peer advocacy, parent support, specialized parent and youth training, skill development, activity therapies, and home/school/community-based interventions.

ACRC urges its members as well as other practitioners in the field to implement the rational approach to psychotropic medication described in this paper and the specific practices identified, and to be active consumers of the evidence basis for psychotropic medication. Judicious use of these medications alongside other therapies will allow for the children and families we serve and support to grow and thrive to the best of their ability.

For more information you may contact ACRC at (877) 33ACRC or www.acrc-dc.org.

Authors: Krishnan, Mohan, Ph.D. ABPP; Bellonci, Christopher, M.D., Foltz, Robert, Psy.D., Lieberman, Robert E., M.A., LPC

References

- Anda, R.F., Felitti, R.F., Walker, J., Whitfield, C., Bremner, D.J., Perry, B.D., Dube, S.R., Giles, W. G. (2006). The enduring effects of childhood abuse and related experiences: a convergence of evidence from neurobiology and epidemiology, *European Archives of Psychiatric and Clinical Neuroscience*, 256, 174-186.
- Chen, H., Patel, A., Sherer, J., & Aparasu, R. (2011). The definition and prevalence of pediatric psychotropic polypharmacy. *Psychiatric Services*, 62, 1450-1455.
- Foltz, R. & Huefner, J. C. (2013). The subjective experience of being medicated in troubled youth: A sample from residential treatment. *Journal of Child & Family Studies*, published online 10/15/2013.
- Goodwin, R., Gould, M. S., Blanco, C., & Olfson, M. (2001). Prescription of psychotropic medications to youths in office-based practice. *Psychiatric Services*, 52, 1081-1087.
- Handwerk, M. L., Smith, G. L., Thompson, R. W., Spellman, D. F., & Daly, D. L. (2008). Psychotropic medication utilization at a group-home residential facility for children and adolescents. *Journal of Child & Adolescent Psychopharmacology*, 18, 517-525.
- Jensen, P. S., Bhatara, V. S., Vitiello, B., Hoagwood, K., Feil, M., & Burke, L. B. (1999). Psychoactive medication prescribing practices for U.S. children: Gaps between research and clinical practice. *Journal of the American Academy of Child & Adolescent Psychiatry*, 5, 557-565.
- Jureidini, J., Tonkin, A., & Jureidini, J. (2013). Combination pharmacotherapy for psychiatric disorders in children and adolescents: prevalence, efficacy, risks and research needs. *Paediatric Drugs*, 15, 377-391.
- McClellan, J. M. & Werry, J. S. (2003). Evidence-based treatments in child and adolescent psychiatry: An inventory. *Journal of the American Academy of Child & Adolescent Psychiatry*, 42, 1388-1400.
- McConnell, C. & Taglione, P. (2012). Collaborating with clients and improving outcomes: The relational re-enactment systems approach to treatment model. *Residential Treatment for Children & Youth*, 29, 103-117.
- Rapoport, J. L. (2013). Pediatric psychopharmacology: too much or too little? *World Psychiatry*, 12, 118-123.
- Segool, N. K., Meadows, T., Roberts, H., Thorson, R., Dogan, R., Evans, J., Reisener, C. (2013). The effect of location on psychotropic treatment practices among pediatricians. *Journal of Developmental & Behavioral Pediatrics*, 34, 22-30.
- Vitiello, B. (2007). Research in child and adolescent psychopharmacology: Recent accomplishments and new challenges. *Psychopharmacology*, 191, 5-13.