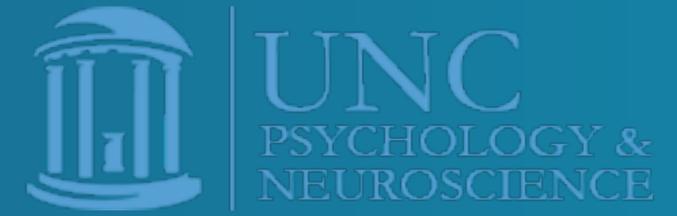




3-C Family Services: A Comprehensive Approach to Mental Health Care

Emily C. Huber – Clinical Psychology Intern
The University of North Carolina at Chapel Hill



3-C Family Services Mission

3-C Family Services seeks to utilize an interdisciplinary approach to promote child health/development, strengthen family relationships, and provide a variety of treatment options to patients.¹

The Three C's:

- Communication
- Cooperation
- Confidence



Organizational Structure

Founders of the organization sought to integrate mental health professionals from a variety of disciplines. Today, clinicians at 3-C range from psychiatrists and psychologists to social workers.

The overarching foundation of 3-C is research – the organization prides itself in evidence-based treatment. 3-C Institute for Family Development is the organization's sister company, which aids in research-based practice. The two organizations work together in obtaining governmental grants to carry out research-based interventions.²

Typical Tasks

- **Weekly Case Conference**
 - Clinicians discuss difficult patients and brainstorm the most promising treatment options.
 - I participate in discussion by offering insight from the college age demographic.
- **Completing Literature Searches**
 - Filtering through appropriate journals and compiling information into documents that are easy to understand.
- **Organizing Presentations**
 - Magellan Middle School cyberbullying video, graduate school class on autism interventions
- **Attending the North Carolina Psychiatric Association annual meeting**
 - Lectures, networking, etc.
- **Discussing and analyzing American Board of Psychiatry and Neurology articles**

Dialectical-Behavioral Therapy (DBT)

Overview: DBT is a cognitive-behavioral treatment traditionally developed to treat individuals with chronic suicidal ideation, but is now widely used for individuals with borderline personality disorder⁴. Adaptations of DBT have been developed to treat substance use, eating disorders, oppositional defiant disorder, and as well as others^{3,5}.

Primary Focuses:

- **Acceptance:** distress tolerance & mindfulness interventions
- **Change:** emotion regulation & interpersonal effectiveness⁴

Marsha Linehan – Founder of DBT

“I love teaching my clients skills, teaching them how to put aside all the negative, anti-self emotions, and how to see themselves **for who they really are**, which is good people capable of receiving and giving love.”⁶

Hyperprolactinemia in Bipolar Disorder

Prolactin-Dopamine Feedback Loop: Dopamine inhibits prolactin release.⁷

- Second and third generation antipsychotics **block the dopamine D2 receptor**, increasing PRL levels. Since antipsychotics treat bipolar disorder, **there is an increased risk of hyperprolactinemia in these individuals**⁸.

Conclusion: When prescribing antipsychotics, physicians should use “prolactin-sparing” medications to reduce the risk of hyperprolactinemia.

- Clozapine, Olanzapine, Quetiapine, Aripiprazole, Ziprasidone⁹

Medication	Risk of Weight Gain?	Risk of Hyperprolactinemia?	Additional Comments
Aripiprazole (Abilify)			
Asenapine (Saphris)	Low	Medium	-2% hyperprolactinemia incidence in 5mg, 1% for 10mg; no exact measures reported
Olanzapine (Zyprexa)	High	Low	---
Risperidone (Risperdal)			
Quetiapine (Seroquel)	Medium	Low	Hyperprolactinemia not observed in human clinical studies, only in rats
Ziprasidone (Geodon)			
Lurasidone (Latuda)	Low	Medium	Median change of prolactin in female patients: +1.5 ng/mL
Cariprazine (Vraylar)	Medium	Low	Decreases in prolactin levels observed (-8 ng/mL)

Figure 1: Relative risk of hyperprolactinemia in second-generation antipsychotics approved for bipolar disorder

Gender Differences in Autism Presentation

“Socially constructed gender biases shape the way that ASD-related behaviors are tolerated and perceived¹².”

The Camouflage Hypothesis

- Girls are better able to “camouflage” their symptoms, making it more difficult to diagnose.^{10,11}

Girls with ASD...

- Engage in **less repetitive behaviors**
- Have **superior interpersonal skills**
- Are more prone to **internalizing behaviors**¹¹

Knowledge & Skills Gained

Worksite-Specific Skills

- **Clinical reasoning:** responding to patient questions/concerns, assessing promising medications
- **Practical skills:** writing clinical intake notes, navigating research databases
- **The ability to translate research findings to real-life cases:** navigating ethical dilemmas, writing up treatment plans



Career and Professional Development

- **Interview preparation:** translating experiences to concise talking points
- **Resume and cover letter writing**
- **Networking skills:** generating questions, participating in academic conversations
- **Etiquette for professional conferences:** attending lectures and compiling findings into reportable data
- **Problem-solving, confidence, independence, etc.**



Implications & Lessons Learned

- **Teamwork is a very important part of any clinical organization.** If any one clinician is feeling “stuck,” there will always be others to help brainstorm potential solutions.
- Working professionals are always very busy – **it is important to assert yourself** if you need help with something or are looking to learn something new.
- **Mental health challenges do not discriminate** – they affect individuals across demographic and class lines. Access to mental health care is a continuing problem today.
- Most significantly, I am emerging out of this internship with **an even stronger drive** to enter the medical field. I will carry **my passion for mental health advocacy** through the rest of my life.

Resources

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¹⁰Dean, M., Harwood, R., & Kasari, C. (2016). The art of camouflage: Gender differences in the social behaviors of girls and boys with autism spectrum disorder. *Autism*, 21(6), 678-689. doi:10.1177/1362361316671845

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