ADHD

An integrative approach to treating ADHD

By Khushbu Joshi, M.D.

There have been numerous epidemiological studies and intervention studies that support direct relationships between nutrition, susceptibility to stress, mental health, and cognitive function across the lifespan, suggesting a strong correlation between a healthy diet and mental well-being (Adan et al., 2019, p. 1322–1323).

A study showed that only 30%-36% of the children and adolescents met the recommended daily allowance for fruits, grains, meat, dairy, and vegetables, thus making them more susceptible to nutritional deficiency (Frank, 2017, p. 28).

Dietary changes over the past century have led to an overall decreased consumption of antioxidants and anti-inflammatory omega-3 fatty acids in the form of fish, grains, and vegetables, and replacement with pro-inflammatory omega-6 fatty acids from refined vegetable oils and processed fast foods (Frank, 2017, p. 78). These changes have made humans more susceptible to inflammatory and autoimmune diseases.

Many psychiatric and cognitive disorders are associated with oxidative stress, inflammation, altered gut microbiome, immune system dysfunction, and/or membrane lipid abnormalities (Frank, 2017, p. 190). This brings into light the potential

Training

Training during a global pandemic: A Child and Adolescent Psychiatry fellow’s perspective

By Christa Belgrave, M.D., M.P.H.

As the end of my fellowship in Child and Adolescent Psychiatry draws near, my days are occupied by shoring up my expertise in child and adolescent mental health. While I reflect on my training, I am struck by the role the COVID-19 pandemic played throughout the past 20 months.

When I started the fellowship in the summer of 2020, my schedule was occupied by clinical rotations throughout the hospital, including inpatient units, the emergency and outpatient departments. At each of these sites, my colleagues and I faced unprecedented numbers of patients, presenting with greater acuity than typically seen within a mental health care system struggling to meet the needs of the communities it serves. Recently we discovered we were not unique in our experiences as the United States Surgeon General released an advisory regarding the crisis in the mental health of American youth earlier this month.

Adapting from in-person to remote

I chose to pursue a sub-specialization after extensive consideration, and I arrived at the fellowship anticipating many challenges ranging from long hours to complex cases. I had been advised regarding the precarious balance of personal and work life that haunts many physicians, especially during training.

However, I could not plan for the extent to which the pandemic would influence all aspects of my training.

We had to adapt quickly, going from 100% in-person visits to a 100% remote outpatient practice, utilizing iPads to

Free Parent Handout…

• Low risks for antidepressants in pregnancy, but clinicians and parents still face challenges
antioxidant, anti-inflammatory, and/or immunomodulating properties. In these cases, as well as in situations where the parent or caregiver is reluctant to start a psychotropic medication, it may be appropriate to discuss a stepwise addition of supplements based on laboratory test values of various vitamins and minerals such as vitamin D, ferritin, zinc, red blood cell (RBC) omega-6:omega-3 ratio, and RBC magnesium levels (Frank, 2017, p. 73–88).

We present a case example of a 9-year-old, treatment-naïve patient with ADHD (combined type) whose parents were reluctant to start psychotropic medications but were willing to try alternative therapies. It was recommended for the patient to take an omega-3 fatty acid supplement for 3 weeks, after which the patient appeared slightly less hyperactive. Upon increasing the dosage of omega-3 fatty acid and adding a powdered form magnesium supplement, 6 weeks after use, the mother of the patient noted significantly reduced hyperactivity symptoms followed by improved academic performance. Other members of the family also validated the reduced symptom scores (Frank, 2017, p. 79).

Emanuel Frank, M.D., a child and adolescent psychiatrist who uses nutrient-based interventions in his practice, recommends increasing omega-3 fats in the diet by consuming foods such as flax, chia, and hemp seeds, and decreasing omega-6 fats in the diet by avoiding foods such as corn, soy, sunflower oils, partially hydrogenated fats, and fried foods. He also recommends reducing intake of foods with sugar, flour, artificial food colorings, flavorings, and preservatives and substituting high-carbohydrate processed foods with sprouted grains, proteins, raw foods, probiotics, and organic foods to avoid pesticides (Frank, 2017, p. 73–88).

Since much of the current evidence is correlational, it does not provide specific information about causality or underlying mechanisms regarding how diet affects the gut microbiome and signaling to the brain, levels of metabolites in the blood and gene expression, or how genetics affects the impact of diet on neuronal response and overall mental health (Adan et al., 2019, p. 1326). Therefore, further research examining how a healthy diet can reduce neuronal susceptibility to stress and improve overall mental well-being will inform more specific dietary recommendations for the future (Adan et al., 2019, p. 1322–1323).

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Khushbu Joshi, M.D., is currently a chief resident of the Triple Board (Pediatrics, General Psychiatry, and Child & Adolescent Psychiatry) program at the Warren Alpert Medical School of Brown University. She received her medical degree from Drexel University College of Medicine in 2017. Her interests include integrating a functional approach to treating patients with various psychiatric disorders such as depression, anxiety disorders, and ADHD.

Training

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interface with patients, and didactics via small black boxes on my computer at home instead of around a table with my co-fellows. (My dog was particularly thrilled with the latter).

While these necessary adjustments were made to the way we learned and practiced medicine, the census and acuity across all psychiatric departments soared.

Besides the more than daily utterance of “you’re on mute,” remote didactics made engagement challenging especially when discussing difficult topics. However, remote didactics and grand rounds provided a silver lining, enabling fellows who previously would have missed out, due to illness or vacation, the opportunity to join. In addition, our departmental grand rounds are now recorded and are accessible to a broader audience of peers.

I met virtually with all of my therapy outpatients for the first 6 months of my fellowship. During that time, I remember wondering: How will I learn how to be a child psychiatrist with so much of my training remote? Would I have the same quality of training as previous generations of child and adolescent psychiatrists?

Good preparation

Reflecting on these thoughts today, I can see how reductive my concerns were as the journey I have been on over the past year and a half has been transformative. While I worried about what I could be missing because of the pandemic, I was simultaneously learning how to treat complex cases and manage the full range of intense situations faced by others in this profession during our generation’s pandemic. I was navigating uncertainty alongside my patients while my colleagues and I leaned on one another.

Each of us knows the heartbreak of identifying the ideal clinical setting for a patient, only to find out they are at capacity and not accepting referrals, or sitting with a parent after explaining the waitlist for an inpatient bed. These are not the conditions I expected as a bright-eyed first-year fellow and yet I am grateful to have had these experiences and the opportunity to learn how to manage them on behalf of my patients.

I witnessed and experienced first-hand unparalleled support from colleagues, supervisors, and mentors. On the eve of a call weekend, I stared at a list of 19 patients and felt relief when two of my co-fellows volunteered to come in and divide the responsibilities. On another call weekend, an attending physician volunteered to aid my supervisor. The overwhelming response when attending physicians and co-fellows ask for help is heartening, and I’ve often felt this camaraderie throughout the years.

Now hybrid

My current outpatient clinic consists of a hybrid model, one I anticipate will persist for years to come.

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understand the potential it has for connecting providers and patients.

And yet, while I may never have an answer to the series of questions I asked myself at the beginning of the pandemic, I have an appreciation for the ways in which this time has challenged me while molding me into a burgeoning child and adolescent psychiatrist; one with a deep understanding of the role environmental influences have on the physical and mental health of our patients, one who has gleaned that the strength of a system is composed of the people within it, and one who has witnessed the modeling of supporting one another during unprecedented circumstances.

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**Domestic violence**

**Preventing teen dating violence**

By Alison Knopf

A recent study by Piolanti and Foran (“Efficacy of Interventions to Prevent Physical and Sexual Dating Violence Among Adolescents: A Systematic Review and Meta-analysis”) reviews prevention programs for dating violence in teens. The researchers looked at the programs’ effects on reducing sexual and physical violence.

Those interventions were associated with a statistically significant reduction in overall composite violence, including perpetrating and experiencing physical violence. However, the programs were not effective in reducing sexual violence, the researchers found in the meta-analysis.

Interestingly, the study found that some trials focusing on youth with a history of violence exposure, older adolescents, and those with engaging parents had a greater effect on reducing domestic violence.

Prevention interventions need not be long-term, the study suggested. The researchers found no differences based on length or number of sessions offered.

The findings align with the recommendations for dating and sexual violence prevention recommended by the Centers for Disease Control and Prevention. According to an editorial by M. Ragavan and colleagues published alongside this article, the researchers concluded that “this meta-analysis underscores the vital importance of implementing prevention programs that specifically focus on TDV [teen dating violence] and highlights need for these interventions to be implemented more broadly and intentionally.”

Also called adolescent relationship abuse, TDV is measured in various ways, such as: physical, emotional, or sexual; past year or lifetime.

The United States National Survey on Teen Relationships and Intimate Violence study found that of youth who have dated, • 66% report a lifetime history of emotional violence, • 18% report a lifetime history of physical dating violence, and • 18% report a lifetime history of sexual violence.

Another national survey, the Youth Risk Behavior Surveillance Survey, found that 10% of youth who have dated in the past 12 months report physical and sexual dating violence.

**However, the programs were not effective in reducing sexual violence, the researchers found in the meta-analysis.**

The World Health Organization’s study on women’s health and violence against women included adolescents 15 years and older, and found that 3% to 24% of women reported their first sexual experience was forced, for many, during adolescence.

**Impacts on life course**

Easily implementable prevention interventions for teen dating violence can promote overall adolescent health and wellness, according to the study.

But why don’t these programs prevent sexual violence the way they prevent physical violence? “This may simply reflect that fewer sexual violence incidents were reported in these studies compared with physical violence,” the editorial states. “Additionally, the authors speculate that increases in sexual violence reported in some prevention program evaluations may be a potentially harmful or iatrogenic effect of the programming itself.”

Finally, it’s also possible that the increased reporting of sexual violence in studies is more related to youth recognizing such violence as a result of prevention programming than it is of an actual increase in the violence, the editorial notes.

Sexual violence prevention may need to go beyond the focus on healthy relationships and warning signs of teen dating violence to look at gender equity, gender identity, sexual attraction, and reproductive health education, the editorial states.

**Other forms of violence**

Physical and sexual violence are the most commonly evaluated outcomes across studies, but additional outcomes in future studies could look at other forms of violence, such as sexual harassment and homophobic teasing. These have devastating effects, so prevention programs which intervene are critically important, the editorial states.

Other forms of violence include emotional and psychological abuse (including cyberdating abuse), which are prevalent in adolescent dating relationships, including in early adolescence. Cyberdating abuse, financial abuse, and other violent outcomes should be part of comprehensive violence prevention education, the researchers conclude.

It’s not surprising that physical and sexual violence reduction effects are greater among older than younger adolescents because older teens are more likely to be dating, the editorial notes. Still, there is clear evidence of TDV — sexual and physical — in early adolescence, they