Mindset shift in 2020: Interdisciplinary care for youth with obesity in Alabama







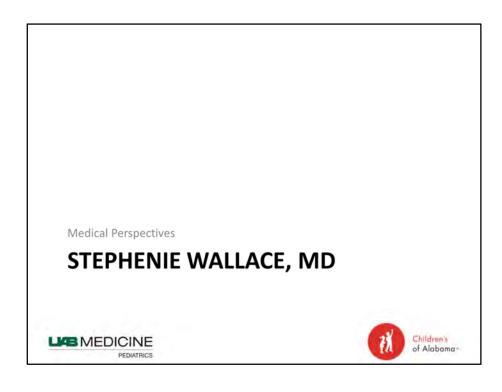
Objectives

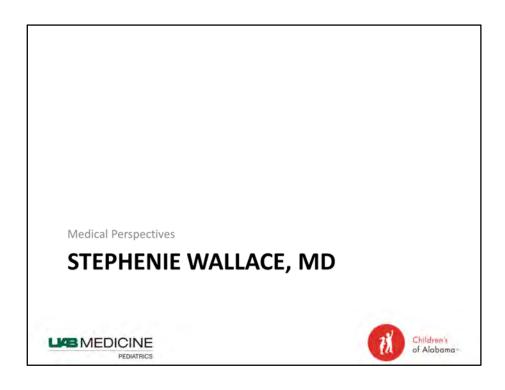
At the conclusion of this presentation the participants will be able to:

- Recognize the health/social/economic impact that 2020 has had on the overweight/obese child and adolescent population.
- ldentify current modifications and adaptations multidisciplinary team members caring for this population have implemented due to the pandemic.
 - Develop strategies that can be applied in the participants clinical practice to prevent and/or reduce the health morbidities associated with increased weight gain.











This picture to represent that we are a collaborative team that enjoys working with each other.

For those who are not familiar with us, we were established in 2002 as the Children's Center for Weight Management under Dr. Frank Franklin

Our name changed about 4 years to SHINE to be more welcoming as many children are not as interested in discussing weight. The same changes goes along with one of our lessons we will discuss today.

We are really an interdisciplinary bunch, working collaboratively with new processes to care for our patients.

We are location at Children's South 1940 Elmer J Bissell Rd in Vestavia



What happened in 2020?

- COVID-19
 - Taken out of normal daily routine (school schedule, seeing friends/family)
 - o Illness of family members causing stress on children
 - Loss of jobs/income → lack of resources (food, ability to come to appointments)
 - Sleep patterns/eating habits/screen time
 - Group activities/sports cancelled
 - Change in cleaning protocols/interacting with patients (mask wearing, physical examination)
- Racial disparities/social unrest
 - COVID-19 unequally affecting people of color as well as those with obesity
 - o Reminded of ongoing pain, anger & fear





Changing the Focus of the Health Care Provider

- Shift in thoughts on weight
 - o Being "skinny" vs. being "healthy"
- Focus on one's quality of life
 - Identify and acknowledge increase stress in the home and stress eating
- Focus on healthy lifestyle choices, not weight
 - Celebrate the small stuff (drinking enough water, getting enough sleep, etc.)
- Pursue a non-judgemental and positive approach to advancing healthy lifestyle choices
 - Support parents motivation to make any changes at any level





COVID-19 & Youth with Obesity

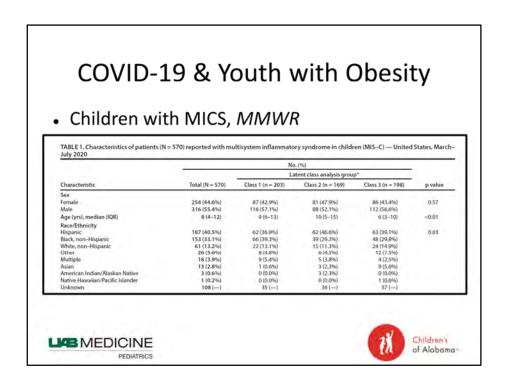
CDC https://www.cdc.gov/coronwinn/2019-ncov/need-extra-precautions/people-with-medical-conditions.html

While <u>children</u> have been less affected by COVID-19 compared to adults, children can be infected with the virus that causes COVID-19 and some children develop severe illness. Children with underlying medical conditions are at increased risk for severe illness compared to children without underlying medical conditions. Current evidence on which underlying medical conditions in children are associated with increased risk is limited. Children with the following conditions might be at increased risk for severe illness: obesity, medical complexity, severe genetic disorders, severe neurologic disorders, inherited metabolic disorders, sickle cell disease, congenital (since birth) heart disease, diabetes, chronic kidney disease, asthma and other chronic lung disease, and immunosuppression due to malignancy or immune-weakening medications.

We do not yet know who is at increased risk for developing the rare but serious complication associated with COVID-19 in children called Multisystem Inflammatory Syndrome in Children (MIS-C), nor do we know what causes MIS-C. Learn about MIS-C.



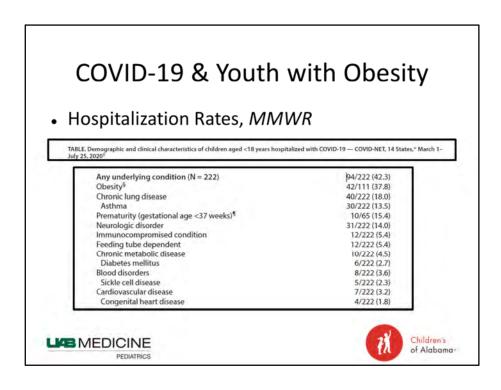




Godfred-Cato S, Bryant B, Leung J, et al. COVID-19—Associated Multisystem Inflammatory Syndrome in Children — United States, March—July 2020. MMWR Morb Mortal Wkly Rep 2020;69:1074—1080. DOI: http://dx.doi.org/10.15585/mmwr.mm6932e2

March 2 to July 18, 2020, had been reported from 40 state health departments, the District of Columbia, and New York City (Figure). The median patient age was 8 years (range = 2 weeks–20 years); 55.4% were male, 40.5% were Hispanic or Latino (Hispanic), 33.1% were non-Hispanic black (black), and 13.2% non-Hispanic white (white) (Table 1). Obesity was the most commonly reported underlying medical condition, occurring in 30.5% of Hispanic, 27.5% of black, and 6.6% of white MIS-C patients.

The proportion of Hispanic, black, and white MIS-C patients with obesity is slightly higher than that reported in the general pediatric population. Hispanic and black patients accounted for the largest proportion (73.6%) of reported MIS-C patients. Acute COVID-19 has been reported to disproportionately affect Hispanics and blacks (10). Long-standing inequities in the social determinants of health, such as housing, economic instability, insurance status, and work circumstances of patients and their family members have systematically placed social, racial, and ethnic minority populations at higher risk for COVID-19 and more severe illness, possibly including MIS-C.**

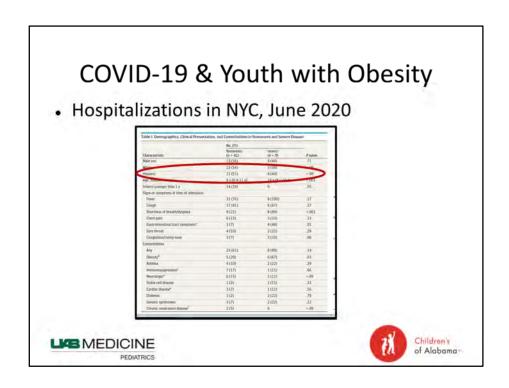


Kim L, Whitaker M, O'Halloran A, et al. Hospitalization Rates and Characteristics of Children Aged <18 Years Hospitalized with Laboratory-Confirmed COVID-19 — COVID-NET, 14 States, March 1–July 25, 2020. MMWR Morb Mortal Wkly Rep 2020;69:1081–1088.

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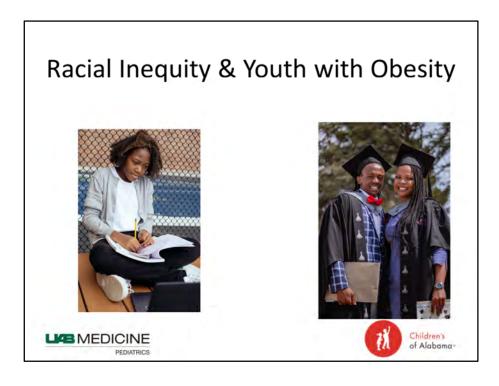
COVID-19—associated hospitalization rates were higher among Hispanic and black children than among white children (Figure 2); the rates among Hispanic and black children were nearly eight times and five times, respectively, the rate in white children.

Hispanic and black children had higher prevalences of underlying conditions (45.7% and 29.8%, respectively) compared with white children (14.9%) where obesity was found to be the most prevalent at 38%



Zachariah P, Johnson CL, Halabi KC, Ahn D, Sen AI, Fischer A, Banker SL, Giordano M, Manice CS, Diamond R, Sewell TB, Schweickert AJ, Babineau JR, Carter RC, Fenster DB, Orange JS, McCann TA, Kernie SG, Saiman L; Columbia Pediatric COVID-19 Management Group. Epidemiology, Clinical Features, and Disease Severity in Patients With Coronavirus Disease 2019 (COVID-19) in a Children's Hospital in New York City, New York. JAMA Pediatr. 2020 Oct 1;174(10):e202430. doi: 10.1001/jamapediatrics.2020.2430. Epub 2020 Oct 5. PMID: 32492092; PMCID: PMC7270880.

The significance of obesity as an independent risk factor for severity is now being increasingly described in adult studies of COVID-19,15 so it was interesting that many of the hospitalized patients in this study had obesity and/or overweight. Obesity was the most significant factor associated with mechanical ventilation in children 2 years and older



- Not much research on the impact of racism on youth's health. Here are 2 I found specifically on weight gain
- Study 1:
- *Psychology & Health*, 2016, The stressors of being young and Black: Cardiovascular health and Black young adults by Lee et al.
- 124 college students 18-27yo
- Findings from the current study indicate that internalized racism was significantly
 associated with BMI. Specifically, it was found that participants who scored high on the
 internalized racism measure also had a higher BMI than those who scored low or
 moderate.

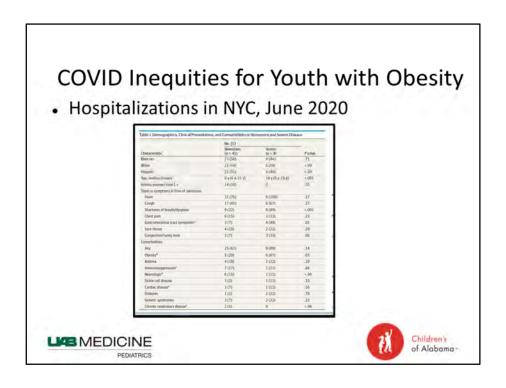
• Study 2:

Racial Discrimination and Low Household Education Predict Higher Body Mass Index in African American Youth, *Childhood Obesity* Feb/March 2018

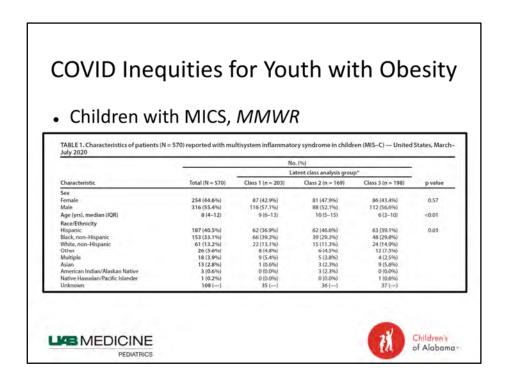
273 11-18yo in southeast Michigan

Residing in a low-education household and exposure to racial discrimination were associated with higher BMI in our cohort

of African American adolescents, particularly among girls. These relationships remained significant even when accounting for the confounding effects of psychological stress, caloric intake, physical activity, and pubertal development.



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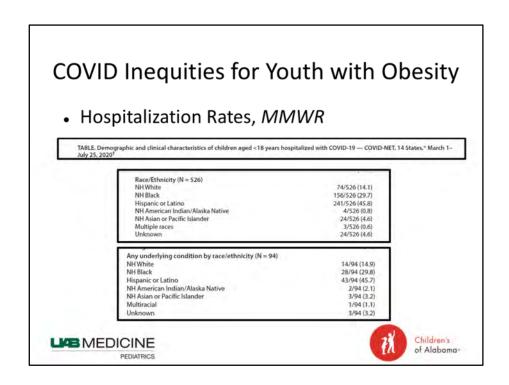
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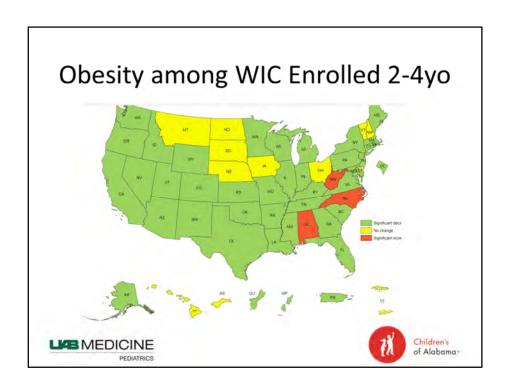


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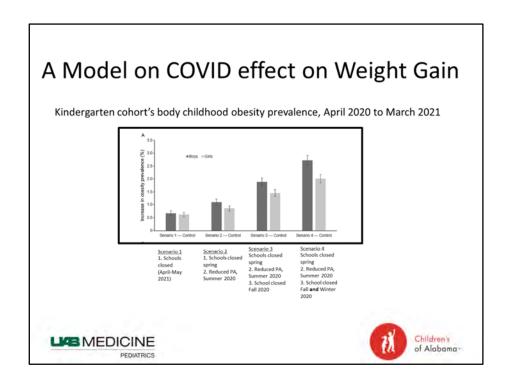


November 2019 "More than 12 million children from 56 WIC state agencies and territories were in the analytic sample. Other findings included:

Obesity decreased by more than 3 percent in New Jersey, New Mexico, Utah, Virginia, Guam, Northern Mariana Islands, and Puerto Rico.

3 state agencies showed significant increases in obesity: Alabama (0.5 percent), North Carolina (0.6 percent), and West Virginia (2.2 percent).

Pan, L., Blanck, H. M., Park, S., Galuska, D. A., Freedman, D. S., Potter, A., & Petersen, R. (2019). State-Specific Prevalence of Obesity Among Children Aged 2-4 Years Enrolled in the Special Supplemental Nutrition Program for Women, Infants, and Children - United States, 2010-2016. *MMWR Morb Mortal Wkly Rep, 68*(46), 1057-1061. doi:10.15585/mmwr.mm6846a3



An, Ruopeng, "Projecting the impact of the coronavirus disease-2019 pandemic on childhood obesity in the United States: A microsimulation model" *Journal of Sport and Health Science*

Background Declines in energy expenditure resulting from canceled physical education classes and reduced physical activity may elevate childhood obesity risk. This study estimated the impact of COVID-19 on childhood obesity.

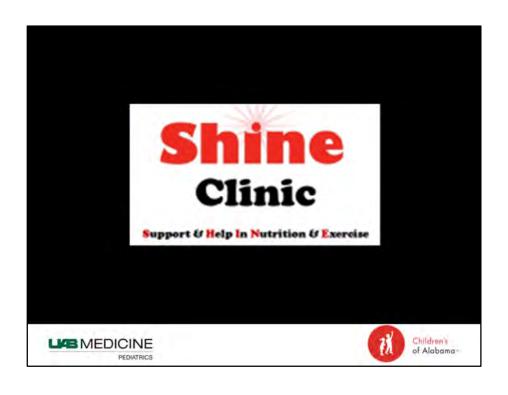
nationally representative kindergarten cohort's body mass index z-scores and childhood obesity prevalence from April 2020 to March 2021 under the control scenario without COVID-19 and under the 4 alternative scenarios Scenario 1: 2-month nationwide school closure in April and May 2020; Scenario 2: Scenario 1 followed by a 10% reduction in

daily physical activity in the summer from June to August; Scenario 3: Scenario 2 followed by 2-month school closure in September and October;

and Scenario 4: Scenario 3 followed by an additional 2-month school closure in November and December.

Compared to girls and non-Hispanic whites and Asians, the impact of COVID-19 on

childhood obesity was modestly larger among boys and non-Hispanic blacks and Hispanics, respectively.





Registered Nurse

Greets families with an open heart

- Intentionally asking about stressors
 - Being honest
 - Being present no shaming, expect tears and laughter
 - Asking about school and home







Registered Nurse

e.g. Well dressed family, but teen expressed himself with tears, found out that his best friend was murdered

· Will share with team, especially MD and SW

• At the beginning, would like patients and families to know that they are not the only one with these











Pediatric Nurse Practitioner

Supporting parents motivation to make any changes at any level is important

Celebrate the small stuff

Find something positive to focus on rather than weight Identify Increase stress in the home and stress eating

Keep it simple





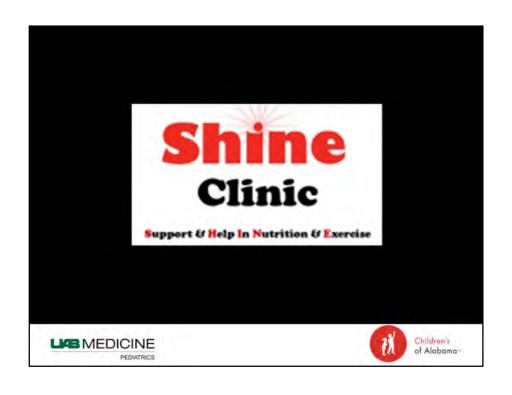
Sleep Hygiene

- Link between sleep and health
- Lack of schedule during the school week
- Increase screen time: phone and video games late at night
- Lack of physical activity during the day











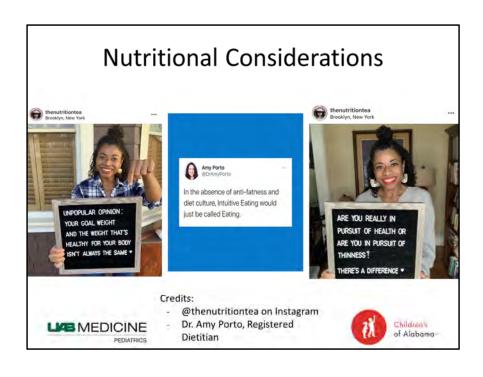


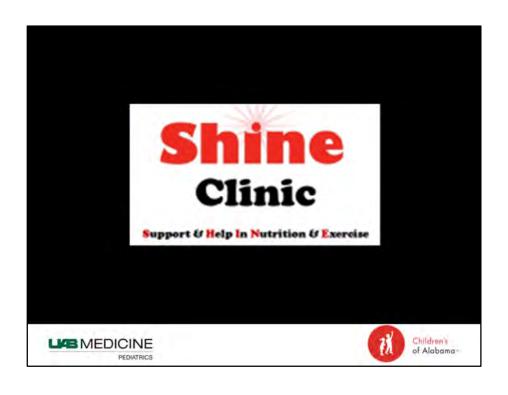
Nutritional Considerations

- Access to food
 - O Grocery stores within 5 mile radius
 - Quality/prices of food offered
 - Safe transportation to grocery stores
- Virtual schooling
 - Kids at home → lack of schedule → overeating
- Shift of thoughts on weight & obesity
 - Eating to be healthy vs. eating to be "skinny"
 - Intuitive eating
 - o More of a focus on "Health At Every Size"
- Environmental stressors → Overeating
 - o COVID-19, Political Unrest, Social Unrest,









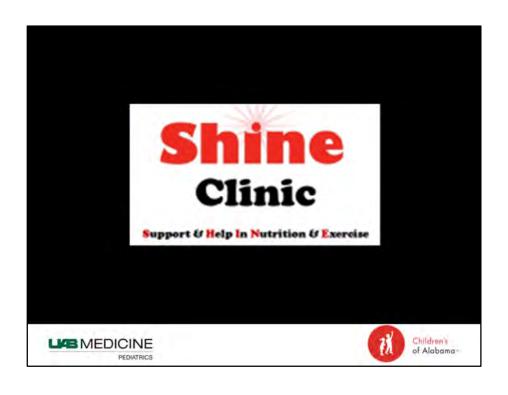


Social Work

- How has COVID effected an already stressed population?
- · People do what is comfortable/familiar
 - O Food, behavior, stress management, and resilience
- · Heightened parental concern for child's well being
- Increase of social media, the benefits and consequences of so much screen time.
- Families impacted by coronavirus hospitalizations
- Children's unaddressed fears and concerns from media sources (COVID and Political)









Physical Therapist

Previous challenges

- Motivation
- Environmental challenges
- Muscle weakness
- Poor endurance
 - PACER testing
- Pain
- Lack of exercise/activity "partners"







Physical Activity and Exercise

Current challenges

· All of the previous

AND

- Heightened concerns with Motivation
- Heightened disruptions of family schedules
 - School
 - o Work
 - Home routines
- Confusing "Screen" use/messages





Physical Activity and Exercise

Health fitness screening still applies

- · Assess general strength
- Assess joint concerns
- Asthma questions
 - o Education needed?
- · Cardiovascular fitness testing
- Do-able individualized goals
 - o Meet the child, teen family where they are







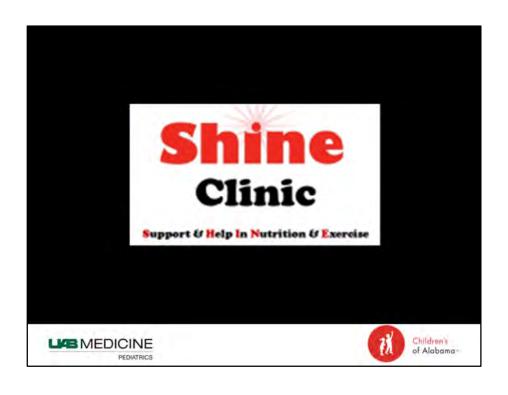
Physical Activity and Exercise

Current Clinic Challenges

- · Perfecting use of MI
- Balance EBP fitness education with encouragement
- · Focus on parents/adults
 - Encourage role modeling
- Frequent check-ins on solving "road-blocks"
- Don't be afraid to "back-up" on goals
- Listen well
- Remember the fun-factor with exercise









Everyone does not have the same experiences and opportunities



Create a culturally safe medical homewhere the providers acknowledge and are sensitive to the racism that children and families experience by integrating patient- and family-centered communication strategies and evidence-based screening tools that incorporate valid measures of perceived and experienced racism into clinical practice.

Screening for Racial Injustice

Being treated differently

- "Do you feel that you are treated differently because of who you are: size, skin color, sexuality?"
- · Validated Measures:









https://services.aap.org/en/news-room/aap-voices/a-pediatrician-makes-a-promise-to-his-black-patients/

"But before I send you home, I want you to know that this pediatrician is trying to be better. I want you to know that despite my best efforts, I still carry subconscious biases, but I am working to identify and reconcile them.

As your doctor and as a fellow human, I want you to know that regardless of who you are, where you are from, the injustices you have faced or are yet to face, you are special. You matter. You are loved more than you can imagine. At the end of our time together, I will give you a high-five or a fist bump or a hug because, despite our different races, you are safe with me and I will always feel safe with you.

And even though I may only occupy a few moments of your day, please know:

I hear you."

Conclusions: Where do we go from here?

- Continue to fight for the health of all children
- Take note of what you learned in 2020 as a person, and champion for child health
- The year 2020 was tough but it is now our past
- Let's march forward together into a better 2021!



Support & Help In Nutrition & Exercise



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