

physical activity decreased (Δ -1.9 hr/wk, $p=0.02$). Age, pre-existent psychosocial problems and pre-pandemic questionnaire scores were associated with improved or deteriorated questionnaire scores in specific subgroups. For example, children who did not fulfill WHO physical activity criteria pre-pandemic showed a further decline from 2.8 to 0.7 h/wk ($p=0.001$). Children with high emotional and external eating during lockdown had the lowest QoL scores (p -values <0.01). Qualitative data showed that an increased demand for food was frequently observed ($n=21$), mostly in children aged <10 years (19/21). This was attributed to loss of daily structure, increased stress, or emotional eating. Families who reported no changes ($n=15$) or improved eating behaviors ($n=11$) attributed this to already existing strict eating schemes that they kept adhering to.

Conclusion: This study shows differential response profiles to COVID-19 lockdown in children with severe obesity. Although on group level lifestyle scores averaged out, a substantial part of families reported deterioration in physical activity and eating behaviors. Children with pre-existent psychosocial problems, high external or emotional eating scores were most at risk. Health care professionals should target these vulnerable children to minimize short- and long-term negative physical and mental health consequences.

Diabetes Mellitus and Glucose Metabolism

COVID-19 AND DIABETES

Impact of Covid19 Lockdown on Glycemic Control

Giovanna Rodriguez, MD¹, Mert Bahtiyar, MD²,
Johnathan Kirupakaran, MD¹, Alaa Kubbar, MD³, Shikha Singh,
MD³, Suruchi Karnik, MD³, Syed Salman Hashmi, MD¹,
Gul Bahtiyar, MD, MPH¹.

¹Woodhull Medical Center, Brooklyn, NY, USA, ²Yale University School of Medicine, New Haven, CT, USA, ³SUNY Downstate Health Sciences University, Brooklyn, NY, USA.

Evidence shows that people with poor glycemic control are at greater risk of mortality due to Covid19. It is important to achieve and maintain good glycemic control to prevent negative outcomes during this pandemic (1). To study the effect of lockdown on glucose control we conducted an observational, retrospective cohort study involving 98 patients followed at endocrine clinic at an inner city, community hospital in Brooklyn, NY in the period February to May 2020. Of the cohort, 60% were women, mean age was 54.1 + 15.3 years, 70% was Hispanic, 24% was African American with a predominance of type 2 diabetes (86%). Mean HbA1c of prelockdown and lockdown phase was $9.77 \pm 2.26\%$ and $9.49 \pm 2.17\%$ respectively and the difference was statistically significant ($p < 0.001$) both in patients with Type 1 and Type 2 diabetes. Mean BMI of prelockdown and lockdown phase was $30.5 \pm 6.8\%$ and $30.1 \pm 6.05\%$ respectively and the difference was not statistically significant ($p = 0.33$). Despite no significant change in BMI, the factors responsible for improvement in HbA1c might be a result of refined eating patterns (increased consumption of home-made food), increased adherence to medication and time to cope with the daily challenges of diabetes management (1).

Reference: Maddaloni E, Coraggio L, Pieralice S, Carlone

A, Pozzilli P, Buzzetti R. Effects of COVID-19 Lockdown on Glucose Control: Continuous Glucose Monitoring Data From People With Diabetes on Intensive Insulin Therapy. *Diabetes Care* Aug 2020, 43 (8) e86-e87; DOI: 10.2337/dc20-0954

Diabetes Mellitus and Glucose Metabolism

COVID-19 AND DIABETES

Implementation of a Continuous Glucose Monitoring Program at a Safety Net Hospital During Covid 19 Pandemic

Erin E. Finn, MD¹, Lindsay Schlichting, BSN, RN, CDCES²,
Rocio Ines Pereira, MD².

¹UNIVERSITY OF COLORADO, Aurora, CO, USA, ²Denver Health Medical Center, Denver, CO, USA.

Background: COVID 19 disproportionately impacts individuals with diabetes leading to increased morbidity and mortality. Hyperglycemia is common in hospitalized patients with COVID requiring intensive monitoring and management. Close monitoring of glucoses requires increased use of personal protective equipment (PPE), which has been in limited supply since the beginning of the pandemic. The FDA granted conditional allowance for use of continuous glucose monitors (CGM) in hospital settings during the COVID pandemic to allow for preservation of PPE. We present the process of implementing a continuous glucose monitoring program in an urban safety net hospital.

Methods: The program was implemented at a county urban safety net hospital. Patients were eligible to be started on Dexcom G6 CGM if they had hyperglycemia requiring multiple insulin injections daily, were in contact isolation, and were located in 1 of 3 units of the hospital (medical intensive care unit [MICU], surgical intensive care unit, COVID 19 floor unit). Initial program was started in the MICU and subsequently expanded. Nurses and staff underwent training using videos, in-person demonstrations, and written guides. Informational Technology modified the electronic medical system to allow for ordering and documentation of CGM values by nurses. Supplies were stored both on unit and in central supply allowing for primary team to initiate monitoring independent of diabetes team. Records of patients participating in program were maintained by the diabetes team. Amount of PPE saved was estimated to be 10 instances/day while on insulin drip and 3/day when using subcutaneous insulin.

Results: A total of 69 patients used a CGM during their hospital course. Average age was 56 years old, 69 % were male, average BMI 31, and 84% had known diabetes prior to admission. The majority of patients were critically ill with 68% intubated, 48% on vasopressors, 6% requiring dialysis, 38% on insulin drip, 46% were on tube feeds, and 74% received steroids. The racial demographics of the patients were 72% White, 3% Black, 4% Native American, 4% Asian, and 14% other. For ethnicity, 73% identified as Hispanic and half spoke Spanish as their primary language. An estimated 2600 instances of PPE were saved. Challenges that were faced in implementing the program included consistent training of large numbers of staff, maintaining