Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

244 Prenatal and Perinatal Risk Factors for Lower Respiratory Tract Infections in Inner-city Minority Infants

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RATIONALE: Children born in urban minority populations are at higher risk of respiratory morbidity, including lower respiratory tract infections (LRTI) and the ongoing COVID-19 pandemic. There is a critical need to identify risk and protective factors for LRTI in this vulnerable population.

METHODS: We examined 3,131 mother-child dyads from the Boston Birth Cohort (BBC), a predominantly urban, low-income, minority birth cohort, aiming to identify prenatal and perinatal predictors of LRTI during infancy (0-12 months). LRTI were defined as the presence of bronchiolitis, bronchitis, or pneumonia, as documented by ICD9/10 diagnosis codes from electronic medical records. LRTI predictors were selected using Akaike's Information Criteria (AIC) and stepwise logistic regression.

RESULTS: The strongest predictors of LRTI during infancy in this population were preterm birth (adjOR=1.64, 95%CI 1.31-2.05), multiparity (adjOR=1.53, 95%CI 1.20-1.96), male sex (adjOR 1.43, 95%CI 1.15-1.77) and maternal overweight and obesity (adjOR=1.37, 95% CI1.09-1.71). Breastfeeding (adjOR 0.73 95%CI 0.57-0.93), vaginal delivery (adjOR 0.75, 95%CI 0.60-0.94) and maternal age 24-35 years (adjOR 0.65 95%CI 0.50-0.85) were negatively associated with LRTI. Interestingly, race and maternal education were comparable between infants with and without LRTI.

CONCLUSIONS: In this sample of high-risk U.S. minority children, we replicated some known clinical predictors of early life LRTI. Our findings also raise important questions as to why prenatal factors such as maternal obesity increase LRTI risk. Such information, along with underlying mechanisms, if further confirmed, would inform primary prevention efforts starting *in-utero* in vulnerable populations. Finally, this study motivates further investigation into whether these susceptibility factors apply to COVID-19 among minority children.

245 Implications of the COVID-19 Pandemic on Asthma Control and Socioeconomic Factors in Inner-City Cohort: A Rapid Online Cross-Sectional Survey

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RATIONALE: The COVID-19 pandemic produced unprecedented disruption to many social determinants of health. We sought to explore the initial impact of the COVID-19 emergency on asthma control and health in school-age children and their families.

METHODS: We remotely surveyed the parents of children attending elementary school in a city in the Northeast, about their experiences from February-July 2020. We recorded demographic information about the children and their family members, COVID-19 associated illness and testing, asthma control, and socioeconomic factors related to health.

RESULTS: The online survey was completed by 120 families. Seventy-four households (66.7%) had ≥1 adult working outside the home during the state of emergency. Two children (1.7%) had documented illness with SARS-CoV-2. Documented or suspected COVID-19-related illness was reported in ≥1 family member in 9.9% of households. Thirty-six children (30%) had asthma. During the initial period of the COVID-19 emergency, parents generally perceived their children's asthma as well-controlled (52.8%) or completely-controlled (41.7%). Most families reported good adherence to asthma medications (76%), though some (11.1%) expressed reluctance to access medical care during the outbreak. Nearly all children were offered online education during school closures. Many families reported that technical and/or logistical barriers limited participation.

CONCLUSIONS: Notable proportions of families reported working outside the home and experiencing COVID-19-related illness during the first 4 months of the pandemic. Despite significant disruption to daily life, the situation tended to enhance protective factors on asthma control. Further studies are needed to better guide management of pediatric asthma and evaluate socioeconomic changes occurring during the COVID-19 emergency.

246 Clinical Characteristics of SARS-CoV2 Infected and Exposed Patients at a Tertiary Care Allergy/Immunology Program in Florida

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RATIONALE: Immunocompromised persons are logically thought to have increased risk of severe SARS-CoV-2 infection (COVID-19) and Florida has one of the highest number of COVID-19 cases nationally. How allergic and immunologic disorders affect the clinical course of COVID-19 is not fully understood. Hence, we characterized the demographics, symptoms, diagnosis, comorbidities, and disease severity of patients in our academic allergy/immunology program in Florida with SARS-CoV2 infection or direct exposure to household contacts. Infection was confirmed by viral nucleic acid testing or antibody serology.

METHODS: We performed a referral-based retrospective chart review of patients described above.

RESULTS: Of 18 patients, most had allergic conditions (60%) and/or antibody deficiency (55%). One patient was asymptomatic with severe T-cell lymphopenia and another had combined immunodeficiency and untreated hypogammaglobulinemia. The median age of 12 symptomatic patients with COVID-19 was 18 years with similar sex distribution and divided equally as to staying home, going to emergency department or becoming hospitalized (33% each). Six patients with COVID-19 household contacts were asymptomatic (2 PCR negative, 1 IgG seropositive, 3 not tested). Six of 18 had serological testing and 3 (50%) were positive for SARS-CoV2 IgG antibody. All hospitalized patients had comorbidities of asthma and/or obesity. All patients were treated supportively and none required respiratory support or died.

CONCLUSIONS: This observational study suggests that in our predominantly pediatric population with allergic and immune disorders, mostly young adults become infected and symptomatic. Comorbidity with asthma and obesity increases hospitalization. Whether non-asthmatic allergic disorders and/or immunodeficiency affects infectivity or morbidity is unclear.