# Medical Evaluations in Rhode Island for Suspected Child Abuse and Neglect Prior to and During the COVID-19 Pandemic

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#### **ABSTRACT**

During the COVID-19 pandemic, there was an increase in several risk factors for child maltreatment. There was also a sudden decrease in the systems available to identify and support at risk children and families. This study aims to describe the number of children presenting to specialized medical care for suspected child abuse and neglect during the first seven months of the COVID-19 pandemic compared to the three previous years. This was a retrospective chart review of all cases evaluated by the child abuse team in Rhode Island from March 1st until September 30th of 2017, 2018, 2019 and 2020. During the first seven months of the COVID-19 pandemic, there were 10% fewer children evaluated by the child abuse team with the most significant decrease (35%) in the number of children evaluated for physical abuse. With the known increased risk factors for physical abuse due to COVID-19, the decrease in the number of children evaluated for physical abuse is unlikely due to a decrease in the incidence of physical abuse. This decrease is most likely due to physical abuse not being identified or children not being referred to specialized medical care. Without the ability to see and interact with children in person, professionals' ability to identify child victims of abuse is limited. Professionals working with children and families at risk should develop strategies to be able to continue to provide in-person services in the future if another pandemic or natural disaster occurs.

**KEYWORDS:** Child Abuse, COVID-19, Maltreatment

## INTRODUCTION

Child maltreatment affects thousands of children each year across the United States and the world. Annually, Child Protective Services (CPS) identifies approximately 670,000 US children affected by abuse and/or neglect with approximately 3,000 of those children residing in Rhode Island.¹ Child maltreatment, which includes physical and sexual abuse and all forms of neglect, is an adverse childhood experience associated with negative short- and long-term effects on a child's physical health, psychological health, and overall well-being.² Identifying those affected by maltreatment

and connecting them with appropriate interventions has demonstrated improved outcomes including the prevention of repeat victimization.<sup>3-6</sup>

Prior to the COVID -19 pandemic, previous studies demonstrated that both family and community stressors increased the risk of child maltreatment by weakening systems in place to protect children and prevent their victimization. The COVID-19 pandemic resulted in conditions that threaten the health, stability, and well-being of children. These conditions include: the morbidity and mortality of children's caregivers, caregiver job loss, increased rates and exacerbation of mental health conditions and domestic violence. As a result, there is significant concern that the COVID-19 pandemic placed more children at risk of maltreatment.

Identifying and reporting child maltreatment is essential to connect families with services and have CPS assess the child's safety. School closings and virtual medical appointments were strategies to decrease the spread of the virus. The unintended negative consequences of this approach resulted in fewer opportunities for children to disclose and for professionals to notice signs of maltreatment. In 2019, the year prior to the pandemic, 21% of the reports to CPS nationally were made by education personnel and 11% by medical professionals.1 With schools closing in March 2020, and the initiation of distance learning in Rhode Island, a large group of professionals to whom children disclose, and who may notice concerning injuries, lost their direct interaction with children. Medical providers also saw fewer patients initially during the pandemic and started to complete visits virtually. While virtual medical visits importantly increase access to healthcare providers, this format for interacting with patients has limitations for identification of children experiencing victimization. During the early part of the pandemic, families avoided all medical settings due to concerns of exposure to COVID-19. A study by Kaiser et al found fewer children presenting to the hospital with any medical concern early during the COVID-19 pandemic. This study also showed fewer children evaluated for physical abuse concerns during that time.11 Furthermore, social distancing prevented children from having access to friends, neighbors, and extended family members. These important social networks are critical for normative social development and provide opportunities for children to disclose



child maltreatment to a trusted individual. In the setting of predicted increased rates of child abuse and neglect, these factors likely created conditions that decreased the detection and reporting of child maltreatment during the pandemic. Per data from CPS, there was a 23% decrease nationwide in the number of identified victims of child maltreatment from April–June of 2020 compared to 2019.<sup>12</sup>

The objective of this study was to compare the number of children receiving a medical evaluation for physical abuse, sexual abuse, and neglect during the first seven months of the COVID-19 pandemic (March 1, 2020–September 30, 2020) with the same months in the three years prior to the pandemic (2017, 2018 and 2019). This data will help inform how the COVID-19 pandemic affected health and safety.

## **METHODS**

# **Data Source and Study Population**

The Rhode Island Hospital Institutional Review Board approved this study. In Rhode Island, there is a single medical program staffed by providers with subspecialty training in child abuse pediatrics, who complete comprehensive evaluations for suspected physical abuse, sexual abuse, neglect, and all other forms of maltreatment. Patients included in this study were between the ages of 0 and 18 years of age medically evaluated by this specialized hospital-based child abuse pediatrics team, for all forms of child maltreatment during the study period as detailed below. Patient information was collected and reviewed using this team's database.

# **Demographics and Initial Hospital Evaluation**

Patients who met criteria for inclusion in the study were placed into a study database in RedCap. Demographic information was collected by reviewing the electronic medical record and reviewing the consultation or clinic note. Data collected included the child's age, the child's gender, the reason for evaluation, the month and year of evaluation, the type of evaluation (inpatient/emergency department consultation or outpatient clinic) and the type of maltreatment concern.

## **Study Period**

The study period starts in March since the first confirmed case of COVID-19 was diagnosed in Rhode Island on March 1st, 2020 and all public schools in Rhode Island were closed by March 16th, 2020. Cases were included from March 1st through September 30th of 2020 to include medical evaluations in the early phase of the pandemic. Cases were also included from March 1st through September 30th of 2017, 2018 and 2019 as a comparison group.

#### **RESULTS**

Review of the child abuse pediatrics team's database identified 2395 children who met inclusion criteria. Table 1 shows basic demographic information of the population. Overall, in 2020, there was a 10% decrease in the average number of children evaluated compared to pre-COVID years (Figure 1). Notably the patient's included in the category identified as "other" included patients who were in DCYF custody and being evaluated prior to initial placement, when changing placements, after being absent from care, or for COVID-19 testing (in 2020). Evaluations of this type were 2.6-4 times more frequent during the pandemic as compared to the three years prior (Figure 2). The average number of children evaluated during the pre-pandemic years (2017-2019) for sexual abuse, physical abuse and neglect were 281, 189, and 123 respectively. In 2020, the number of patients evaluated were 242, 124, and 114 respectively (Figures 3,4,5). There was a 35% decrease in the number of children evaluated for physical abuse in 2020 compared to previous years.

**Table 1.** Demographic information by year of evaluation

	2017 Pre-COVID	2018 Pre-COVID	2019 Pre-COVID	2020 COVID
Total	603	621	618	553
Sexual Abuse	281	284	274	242
Physical Abuse	176	188	202	124
Neglect	122	122	124	114
Other	24	27	18	73
Gender				
Male	242 (40%)	246 (40%)	239 (40%)	190 (34%)
Female	361 (60%)	274 (44%)	372 (60%)	359 (65%)
Transgender M	0	1	5	4
Transgender F	0	0	2	0
Median Age (years)	6	7	7	9

Figure 1. Total number of children evaluated each month

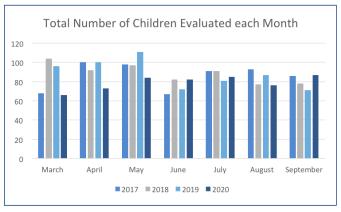


Figure 2. The number of children evaluated each year per area of concern

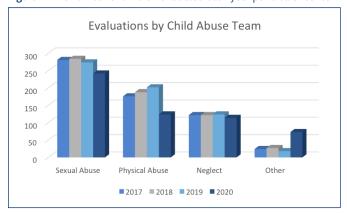


Figure 3. The number of children evaluated each month for sexual abuse

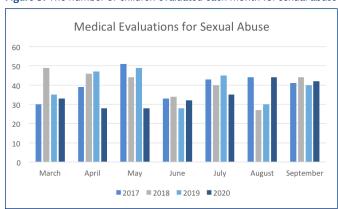


Figure 4. The number of children evaluated each month for physical abuse

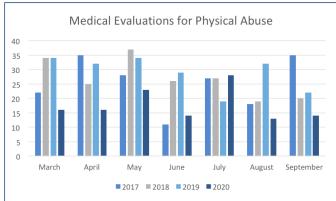
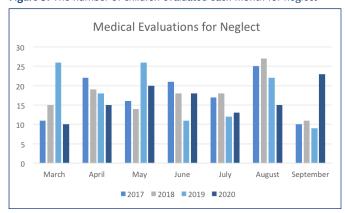


Figure 5. The number of children evaluated each month for neglect



# **DISCUSSION**

In this retrospective study, we found that during the first seven months of the COVID-19 pandemic, the child abuse pediatrics team evaluated 10% fewer patients compared with previous years. There was a 14% decrease in the number of patients evaluated for sexual abuse, a 7% decrease in the number of children evaluated for neglect, and a 35% decrease in the number of children evaluated for physical abuse. Despite a predicted increase in the incidence of child maltreatment during the COVID-19 pandemic, fewer children, especially with physical abuse concerns, received specialized medical care for maltreatment. In contrast, there was a 2.6-4-fold increase in the number of patients evaluated for other concerns. Most children in this group are in DCYF custody and receive medical evaluations related to placement changes or after being absent from care. In 2020, the child abuse pediatric team began offering COVID-19 testing for children in DCYF care, especially in congregate care, which likely affected the increased number of children evaluated in this category.

There are several possible explanations for the decreased number of children evaluated by the child abuse pediatrics team for physical abuse during the pandemic. There could have been a decrease in the number of children physically abused in Rhode Island during this time; however, this possible explanation is unlikely given the known increases in financial stress, mental health crises, substance abuse, and intimate partner violence that was occurring during the same time period, <sup>13,14</sup> which are factors associated with child physical abuse. Another possible explanation is that physical abuse was occurring at similar or higher rates, but children were not identified, and subsequent evaluations were not completed due to a weakened safety net available to children, or families avoiding healthcare settings to decrease COVID exposure. School and daycare closures, distance learning, virtual medical visits, and social distancing, makes this a likely explanation for these findings.

During this study period, there was a decrease in the number of sexual abuse evaluations; however, this decrease was not statistically significant. During April and May of 2020, there was a decrease in the number of children evaluated for sexual abuse, which returned to similar numbers in June compared to previous years. This most likely reflects families staying home during the first few months of the COVID-19 pandemic to minimize exposure in all healthcare settings, which resulted in decreased referrals for subspecialty sexual abuse evaluations. Interestingly, while



the rates of sexual abuse medical evaluations returned to normal, by June of 2020, the rates of physical abuse evaluations remained low through September of 2020, with the exception of July of 2020 which appears to be an outlier.

Similar to physical abuse, the number of children experiencing neglect was predicted to increase during the COVID-19 pandemic due to the expected increase of other risk factors and the decrease of programs providing in-person or in-home services and supports for families. Poverty has also been associated with child neglect and COVID-19 resulted in many families losing jobs and income. 15 Some programs including child tax credits, expanded unemployment benefits, and school lunch programs may have mitigated some of the financial strain on families. In this study there was not a significant change in the number of children evaluated for neglect throughout the study period. This finding may not reflect the true number of children experiencing neglect or reported to CPS for neglect concerns, as this number represents the number of children receiving medical care for neglect.

Children who were evaluated in the category "other" include children in DCYF custody for whom a medical evaluation is requested due to placement into foster care, change in foster care placements, or after being absent from care. With many older children in DCYF custody residing in congregate care, concerns were raised about children and staff being exposed to COVID-19 and there was need for children to complete timely COVID testing following possible exposures. The child abuse pediatric clinic began offering testing for this population to facilitate placement decisions by DCYF and prevent outbreaks in congregate care settings. This new service increased the number of children evaluated in 2020, reflected in the other category. Anecdotally, patients, primarily adolescents living in congregate care within this category of evaluations, left these settings during the early months of the pandemic for several reasons: to connect with family members and peers, to have a break from their feelings of confinement, and others left these settings to engage in high-risk behaviors.

Overall, this study demonstrates that initially during the COVID-19 pandemic, fewer children presented to medical care for specialized evaluations by the child abuse pediatrics team. The decline in medical evaluations in March, April, and May of 2020 was likely seen by most pediatric health providers and probably reflects families avoiding non-emergent appointments to avoid COVID-19 exposure. Following this initial response to the pandemic, the number of children evaluated for sexual abuse and neglect returned to previous rates while the number of children evaluated for physical abuse remained low. Given the known increased risk factors for physical abuse during the pandemic and increased difficulty connecting families with services, it is unlikely that this decrease in children evaluated for physical abuse reflects a true decrease in the incidence of physical abuse

and is more reflective of those children not being identified or not being referred to specialized medical care.

This data highlights the role of medical providers, educational personnel, and other supportive adults as integral parts of the safety net that supports children. When supportive adults can directly communicate and interact with children, it provides an opportunity to assess their well-being, identify concerning injuries, and hear disclosures. These social supports and safety nets came to a sudden halt during COVID-19, which impacted the ability to ensure the safety and well-being of children.

## Limitations

This study has several limitations. This is a retrospective study at a single site in Rhode Island and therefore the information may not be generalizable to other regions across the country. The number of children evaluated in this study was small, and there was not enough data to show statistical significance. The study period begins on March 1st, as that is when the first case of COVID-19 was diagnosed in Rhode Island; however, the most significant effects of COVID on children occurred later in March when school closings, service closures, and virtual appointments began.

## **CONCLUSIONS AND FUTURE DIRECTIONS**

Support networks for children, including medical providers, service providers, and education personnel, etc., are essential to help identify potential maltreatment and support families who are at risk. When natural disasters or pandemics occur, they cause increased stress in families which results in children being at higher risk of victimization. During these times in-home services are crucial to support children and families, and children benefit from time outside the home at school or daycare to interact in-person with peers and supportive adults. Learning from the COVID-19 pandemic, essential services for at-risk families should identify plans to safely continue providing in-person support and care to children and families during future disasters or pandemics.

Future research could look at the effect of the COVID-19 pandemic on the severity of physical abuse and neglect experienced by children due to delayed medical care or identification of abuse potentially resulting in poorly or undertreated medical conditions and injuries.

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