Reduced child maltreatment prevention service case openings during COVID-19

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Abstract

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; COVID-19), is a novel virus that has swept the world causing illness and death. Youth are at a heightened risk of experiencing increased rates of abuse given necessary measures required to slow the spread of the virus (e.g., indefinite school closures). We analyzed data from New York City's Administration for Children's Services (ACS) to investigate the frequency of child maltreatment prevention service case openings during this time of unprecedented stress. Two descriptive investigations were conducted. An examination of trend lines demonstrated that for 2013-2019, New York City's new prevention case openings have consistently peaked in the month of March, for all seven years. New prevention case service openings in March 2020 do not peak, as they do in the preceding seven years. An independent samples t-test indicated that the frequency of case openings of March 2020 is significantly different than the frequency of case openings in March 2013-2019. Further, a Poisson regression model estimated that the odds of opening a new child maltreatment prevention case post-COVID-19 are 179% lower than opening a new child maltreatment case pre-COVID-19 (OR = -0.79, p < .001). These findings highlight the necessity of future research and innovation regarding child maltreatment prevention and intervention services during a global pandemic. This study has important implications for identification, prevention, and documentation for current support, and recommendations for local governments, community members, and practitioners are provided.

Introduction

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV–2) is a highly contagious novel coronavirus causing worldwide illness and death. The disease is thought to have begun in China in December of 2019 (Rodriguez-Morales et al., 2020). Nearly every country has reported being impacted by the novel coronavirus, with 3.7 million cases reported worldwide as of May 5th, 2020. By March, most of the United States had been placed under a mandatory quarantine to slow the increasing spread of the virus.

Due to SARS-CoV–2, referred to herein as COVID–19, individuals around the world are struggling with unprecedented levels of stress. Nearly universally, individuals are reporting experiencing a number of adverse mental health effects due to social isolation measures (Rossi et al., 2020; Wang et al., 2020; Williams et al., 2020). In addition to social isolation, people are coping with other circumstances caused by COVID–19 that are traditionally linked to harmful sequelae, including, but not limited to: job loss and unemployment (Coibion et al., 2020), global economic recession (Fernandes, 2020), grief (Wallace et al., 2020), and anxiety about infection (Ho et al., 2020). An unintended consequence that may occur as a result of the interactions amongst these unique conditions is family violence. Although the COVID–19 pandemic is novel and research is in early phases, a wealth of literature exists examining the association between other mass traumatic events, like natural disasters, and child maltreatment (Seddighi et al., 2019).

Circumstances surrounding COVID–19 may be uniquely related to an increase in child maltreatment as families are spending more time inside, at home. Youth experiencing family violence who would typically
be identified by school personnel (Golbertstein et al., 2020), or who reduce their time in a household with domestic violence or child abuse through attending school and after-school programs, are now quarantined in these homes. In addition to youth and their parents spending more time at home, parents may be engaging in maladaptive coping mechanisms due to stress, such as substance use, which then makes them more susceptible to committing violence. Rosenthal and Thompson (2020) report that on holidays and during summer, incidences of child maltreatment tend to increase. One study found that when student report cards were released on Mondays, Tuesdays, Wednesdays, or Thursdays, there were no significant increases in instances of child abuse; however, when report cards were released on a Friday, there were four times as many substantiated incidents of child abuse (Bright et al., 2018). Thus, it appears that youth and families are particularly vulnerable to experiencing violence during school closures (i.e., holidays, summer, weekends). With schools in the United States closed indefinitely, family violence advocates are concerned about the increased potential for harm (Usher et al., 2020).

It is critical to determine whether families are receiving preventive services during this time when parents and their children are sheltering together at home for an indefinite period. The psychological impacts of quarantine or isolation due to and illness outbreak have been studied in the past. In a review of existing research on isolation during illness breakouts, Brooks et al. (2020) found that parents and children who were quarantined were more likely than those who were not socially isolated to experience post-traumatic stress and symptoms of trauma-related mental health disorders. Alcohol abuse or dependency symptoms were also found amongst quarantined participants, which is important because of the link between parental substance use and child maltreatment (Kepple, 2017). Stressors post-quarantine included financial loss (Brooks et al., 2020); job loss is another factor associated with child abuse and neglect (Scheneck-Fontaine, 2020). Therefore, there is strong evidence to suggest a very high risk for increased levels of family violence and child abuse during the COVID–19 pandemic.

**Study Objective**

Given the strong association between social isolation, stress, financial hardship, and family violence, it is likely that the need for child welfare services and support increased dramatically when social distancing and shelter in place policies were enacted. Despite these reports, to date, there are no studies documenting if service use for child maltreatment prevention and intervention programs has been impacted by COVID–19. The present study seeks to fill this gap in the literature and make a data-based call to action for evolving child welfare outreach efforts.

**Method**

**Sample**

We used child welfare data from New York City’s Administration for Children’s Services (ACS). Available data focused on frequency counts of new case openings for preventive services at twenty-four timepoints
(i.e., January, February, March of 2013 - 2020) across all boroughs of New York City. Preventive services include but are not limited to: parental coaching and stress management, childcare, housing assistance, domestic violence advocacy, substance use treatment, and intensive family treatment (NYC Children, 2020).

As demographic data for new case openings were not available, we report demographics for New York City to contextualize the study. In 2018, there were 1,739,256 youth under age eighteen located in New York City (U.S. Census Bureau, 2018). Approximately 25.9% of youth identify as White, 35.6% as Latinx, and 21.6% as Black. Youth identifying as Asian make up 11.6% of New York City, and youth who identify themselves as “other” make up 5.4%. Slightly over half of youth in New York City live in a household with two married parents (54.9%), while 30.4% live with a single parent, 9.5% live with grandparents, and 5.2% are in another living situation. Over one quarter of families experience economic hardship, with 26.7% of families reporting severe rent burden. As of April 27th, 2020, New York City reported 178,100 COVID–19 cases and 11,708 deaths; this death rate is three to six times greater than the city’s typical death rate (Katz & Sanger-Katz, 2020).

Materials and Procedures

ACS data allowed us to explore changes in preventive case opening trends in the time preceding the COVID–19 epidemic's spread in the United States, and the months following the spread of the COVID–19 epidemic in 2020. New York City is an important population because it has been particularly devastated by the impact of COVID–19.

A database was compiled utilizing New York City ACS “monthly child welfare indicator reports” for January, February, and March for the years 2013 - 2020 (https://www1.nyc.gov/site/acs/about/flashindicators.page). These reports contain information regarding the number of new preventive cases opened in the agency each month dating back seven years. Two descriptive techniques investigated whether there are reductions in new cases of child maltreatment prevention services. First, the number of preventive case openings in March of each year was examined to determine if there was a clear pattern of increasing, stable, or decreasing case openings over time (Figure 1). Second, trend lines were compared for January to March for the years 2013 through 2020 to determine if the pattern of maltreatment prevention service use from January-March of each year was consistent annually, even if March 2020 case openings were significantly different (Figure 2). If the null hypothesis is true, and COVID–19’s spread has had no influence on prevention and intervention services offered by the child welfare system, the number of new prevention service cases would follow the baseline pattern established over the prior seven March periods. In addition, the trend line for January-March 2020 should match that of January - March for the preceding seven years.

Following this, an independent samples t-test examined whether March 2020’s new case openings were significantly different than the years preceding it. If significant, this indicates that the number of new cases opened in March 2020, the first month that shelter-in-place orders were mandated, is significantly
different from new cases opened in March of 2013–2019, before COVID–19. It is hypothesized that the trend in case openings for 2020 will be different than that of 2013–2019, and that the average number of cases reported in March 2020 will be significantly different than that of the average number of cases reported in March 2013–2019. A Poisson regression analysis, used with “count” data (i.e., count of reported cases) was used. As with a typical logistic regression, Poisson regression coefficients represent an odds-ratio of the difference in the logs of expected counts of the dependent variable, based upon a one unit increase in the independent variable. In this study, COVID–19 status was dummy-coded, with “0” referring to March 2013–2019 and “1” referring to March 2020. If the associated p-value is significant, this implies that the independent variable significantly predicts the dependent variable; in this case, it would indicate that COVID–19 status predicts the odds of a new prevention case opening. This study is exempt from institutional review.

Results

First, trends of new cases in the month of March for each year were analyzed (Figure 1). For March 2013–2019, new preventive case openings in New York City ranged from 848 - 1314 ($M = 1012.71$, $SD = 157.26$). In contrast, the number of new preventive cases opened in March 2020 was 393, less than half of the mean of the preceding seven years. An independent-samples $t$-test was conducted to compare case counts between March 2013–2019 and March 2020. There was a significant difference in the scores for March 2013–2019 and March 2020; $t(6) = 3.41$, $p < .05$. Due to the small sample, we also estimated a Poisson regression to model the monthly count of reported new cases before and during COVID–19. When COVID–19 status changes from 0 to 1, the difference in the log odds of a new case opening decreases by.79. Converting this odds-ratio to a probability indicates that the odds of opening a new child maltreatment prevention case during COVID–19 are 179% lower than opening a new child maltreatment case pre-COVID–19 ($OR = –0.79$, $p < .001$).

In Figure 2, we compare trends in case openings for January - March 2013–2019 compared to January through March of 2020. In all years pre-COVID–19, new case openings increased from January-March of each year, peaking in March. In contrast, in 2020, monthly new case openings decreased from January through March, with a minimum in March. When comparing mean new case openings for the month of March in 2013–2019, new case openings in 2020 were 61% lower than mean new case openings over March 2013–2019.

Discussion

There is much conjecture regarding child welfare service use during the COVID–19 pandemic due to increased risk of maltreatment, and speculative decreased use of services due to quarantine mandates and social isolation. We conducted this study to investigate impacts from COVID–19 on child maltreatment prevention services. Our research finds that not only are families in New York City not accessing preventive services at the same rate as before stay-at-home-orders, but that families are also accessing these services significantly less. The magnitude of this decrease is non-trivial: rates of new
prevention case openings for March 2020 are significantly lower than anticipated based on predictive models, and March 2020’s new case opening count was the lowest observed count of the twenty-four time points spanning January - March 2013 - 2020.

Child maltreatment increases in times of stress (Tobey et al., 2013). This study suggests that families who may newly be in need are not receiving services. New York City ACS reports that their preventive services seek to provide intervention to families at-risk before impairment in the home reaches the level of out-of-home placement. Reduced child maltreatment prevention services may increase the risk of maltreatment escalating to out-of-home removals. Out-of-home removals are linked to juvenile justice involvement and psychological impairment (Kolivoski et al., 2017), among other adverse outcomes, and youth of color are disproportionately negatively impacted (Pryce et al., 2019).

Strengths and Limitations

This is the first study to date that uses empirical data to examine the impact of COVID–19 on child abuse prevention services. In addition, New York was one of the first US states to experience a rapid rise in COVID–19 cases. Most other US states have experienced lagged growth in COVID–19 cases with similarly lagged responses. Thus, New York serves as a useful model and test case for understanding and projecting impacts from COVID–19 on other states. The results in this paper suggest a need for increased outreach to families through novel means to bridge gaps in accessing services.

Given the novelty of this study and the precedent it may set for future research, several limitations are important to note. The sample for this study was gathered from New York City, which is a relatively small sample and is in a unique location. New York City’s population is very diverse when compared to the rest of the United States. Notably, this may lead to a risk of these results not being generalizable to the rest of the country. Additionally, given that data were limited to frequencies of reports, researchers were unable to report information on the circumstances of the child maltreatment prevention services that were reported-leaving gaps in the data specific to identifying geographical location, socioeconomic status, familial circumstances, or the mechanism in which it was reported. These details are important for better identifying families that are still accessing child welfare preventative services in the time of COVID–19. Moreover, it is unclear whether lower numbers of preventative cases are due to staffing barriers and complications related to shelter in place orders and/or to less access of families and youth to mandated reporters and prevention services. Lastly, these data are only representative of the beginning of the “shelter-in-place” order and would be stronger with a longer duration under these circumstances.

Recommendations

Identification. To respond to this crisis, community leaders (e.g., community organizers, faith leaders, school personnel, elected officials) should coordinate with mental health providers and social workers to ensure resources are available that are appropriate both to the needs of their respective communities, and
to the unique circumstances of the epidemic. For example, schools should organize virtual check-ins with each individual family to ensure that they are connected to resources. For families they are not able to reach, trusted community leaders can facilitate a coordinated effort of locating and connecting with them. Families that already have a history of abuse or neglect may be particularly susceptible to having children who are not connecting with their teachers or counselors. New ways of identifying child abuse or neglect through remote learning interactions may help teachers identify and refer children and families for social services. Teachers and social workers may need to work closely to connect with students who show warning signs of abuse. Given that many communities may already have limited resources for outreach and resources, social workers can continue to provide virtual check-ins to these families most at risk. Additionally, policymakers should also allocate funds and resources to support the families most in need to reduce the extra stressors due to the COVID–19 pandemic.

Given that schools do not have physical access to their students, communities may benefit by having other essential workers in the community receive training to identify abuse or neglect. Virtual online training for neighbors, grocery clerks, mail delivery personnel, and bank tellers can be utilized as a tool to guide community members in recognizing warning signs of abuse and violence in the home. For example, training employees on the warning signs of abuse for those who interact with families often (e.g., grocery store employees), resources on how to report suspected abuse, and potential resources for families.

Importantly, inequities persist in low-income communities with respect to internet services (DiMaggio & Hargittai, 2001). For this reason, it is recommended that states follow initiatives to provide internet services for communities who may not have access, like initiatives currently in place in New York City (https://www1.nyc.gov/site/acs/about/covidhelp.page). For example, New York City has compiled a list of ways to access cell service and WiFi for low-income families and households with K–12 students. Even in communities where free Internet is offered, there are disparities in which households can access these services (Blume, Kohli, & Esquivel, 2020); local communities should work together to determine how to ensure that this access reaches every household. This is an important step to take for increasing equitable access to maltreatment prevention services, yet additional support helping connect families with these resources is needed through outreach by trained professionals or paraprofessionals.

Prevention. Agencies need to consider how to adapt their resources during times of social distancing. Community centers can offer a space, such as online groups, for caregivers to discuss stressors, connect families to resources, and teach potential coping skills. These groups need to be provided in as many languages as possible to offer space to all families. Social media can be used to distribute help line numbers and other resources. Public service announcements on streaming channels, news channels, and social media can disseminate knowledge about substance use disorders and provide information regarding online groups to curb the risk of increased substance use during the epidemic.

Agencies may also need to consider the unique needs of particularly vulnerable communities. Research identifies social support from the LGBTQ community as a protective factor against suicide and mental
health issues for LGBTQ youth (Kaniuka et al., 2019). Therefore, resources can be allocated to community centers to encourage maintaining virtual connections among LGBTQ youth and mentors during COVID–19. Youth who find themselves stuck in environments that do not affirm their identity places them at risk for abuse. Therefore, social media can be used to distribute anonymous helpline numbers, and can reaffirm to youth that they are not alone and that there are community members who support them.

Undocumented folks make up another vulnerable group to the impact of COVID–19. Although individuals from undocumented communities are more likely to be classified as essential workers (e.g., agricultural workers, grocery personnel), they are also ineligible for unemployment insurance benefits and disaster relief, such as the CARES Act (Villa, 2020). In California, statewide public and private funding sources have allocated $75 million as a disaster relief fund to support undocumented workers who have lost their jobs or wages during the pandemic (State of California, 2020). Through this $75 million fund, an individual can secure $500 and a household can secure $1,000. Other states can model California’s efforts as a starting point in identifying and supporting undocumented individuals, a critical community who are ineligible for federal relief, and in working to provide support to reduce COVID–19 related economic stress.

Documentation. Given that this type of widespread closure of schools and public spaces is unprecedented, federal and local child welfare agencies should release reports of the allegations, substantiations, and service use. Many areas regularly publish data, such as the monthly reports from New York City and Indiana and the quarterly reports from California (https://www1.nyc.gov/site/acs/about/ashindicators.page; https://www.in.gov/dcs/3197.htm; https://ccwip.berkeley.edu/). However, it is vital that this information is reported frequently to help investigate national and local trends of child maltreatment. This type of documentation can also support nationwide efforts to identify the potential factors, such as economic problems and social support efforts, that influence both incidents of abuse during a pandemic and the rates of reports to child welfare services.

Future Directions

Given that stressors have increased and usual sources of support for vulnerable families are less accessible during the COVID–19 shutdowns, society runs the risk of an epidemic of child abuse. Results of this study show that child welfare prevention service case openings have significantly decreased, suggesting that these societal disruptions have made a large impact on service access. In the United States, school personnel are the primary source of reports to child welfare services (U.S. Department of Health & Human Services et al., 2018). It appears that now, more than ever, school personnel and teachers may still be the most important mandated reporters in a child’s life; teachers and personnel may need to consider new and different indicators of abuse and neglect that can be identified virtually.

Future research must explore how, while practicing much-needed social distancing measures, people persist in utilizing preventive child welfare services. Individual-level data would help highlight differences
in reporting depending on geographic location, demographics, and circumstantial differences of child abuse incidents. Although the current study presents a data-driven model of child welfare preventive services during the COVID–19 pandemic, future researchers should aim to include additional months of the “shelter-in-place” order and expand on these initial findings for stronger results. Additionally, future studies would benefit from examining frequency data from other states in order to make current findings more generalizable to the greater United States population.

Future research on risk factors of families, such as, substance use, stress, emotional burden, and unaddressed mental health needs may lead to widespread recommendations of how communities support families during school closures. Additionally, future research on child maltreatment may also benefit from collecting data from families to identify social supports, resources, and services that can reduce familial stress levels when school closures are in place, particularly when shelter-at-home and social distancing policies are in place. Families may require extra support to transition when shelter-in-place orders have been lifted, and post-crisis support services may be needed. Communities, researchers, and policy makers should act proactively to devise plans and social supports for vulnerable youth to best transition to the changes that will be needed post social distancing measures.

When social distancing has ended, on a national level, we will be at a unique transition period as a country. This period of transition may allow researchers, policy makers, and community organizers to re-conceptualize and improve the effectiveness of child maltreatment prevention, identification, and intervention. Given the current circumstances, if new measures are enacted to help with identification, research can highlight the new mechanisms for reporting and support higher levels of safety for youth during and even after social distancing measures have been lifted.

**Declarations**

Competing interests: The authors declare no competing interests.

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**Figures**
Figure 1

A comparison of new preventive case openings in March from 2013 - 2020 in New York City, NY, USA.
Figure 2

A comparison of new preventive case openings in New York City from 2013-2019 and 2020.