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ABSTRACT

Social Distancing, Stimulus Payments, and Domestic Violence: Evidence from the US during COVID-19

We examine the effects of social distancing in response to the COVID-19 pandemic on the reporting of domestic violence to the police in the United States. Using daily domestic violence calls from 31 police departments for the January-September 2020 (compared to 2019), we find that the early spike in police calls disappears around mid-April, coinciding with the distribution of CARES Act stimulus payments. We observe that domestic violence calls for areas with higher concentration of Hispanics and noncitizens remain elevated even after this period. These results underscore the importance of improved access to social safety programs in combating domestic violence.

JEL Classification: J12, J15, I18

Keywords: social distancing, COVID-19, domestic violence, police calls for service

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Starting in early March 2020, COVID-19 dramatically altered everyday lives, as several countries implemented strict lockdown or stay-at-home (hereafter, SAH) measures. Anecdotal evidence suggests a considerable increase in cases of domestic violence (hereafter, DV) worldwide after the introduction of such social distancing restrictions. While earlier studies generally document an increase in the reporting of DV incidents, subsequent studies report either no significant changes or some decline in DV incidents.[1] Despite a growing body of work, limited evidence exists on how these results can be reconciled.

We help fill this gap by examining the changes in DV police calls for service in 31 US cities before and after social distancing restrictions from January to September of 2020 compared to trends for the same period in 2019. As Figure 1 illustrates, the daily number of DV-related service calls to police departments in the United States started to diverge from its 2019 levels immediately after March 9, 2020. This change overlaps with the substantial decline in physical mobility across the country and occurs before the first mandated SAH orders were issued on March 19. This suggests that the main driver was voluntary reduction in mobility. Moreover, we observe that the divergent trends between 2020 and 2019 seem to close starting in mid-April.

Social isolation in the wake of the COVID-19 crisis could have negative consequences for DV experienced by women for many reasons, but three consequences are the most prominent. First, SAH orders force women to spend more time with their potential perpetrators and mechanically cause an increase in DV. Second, tighter financial constraints might increase DV. For instance, the employment rate in the United States fell by approximately 13 percent between February and April (Forsythe et al. 2020). COVID-19-induced employment losses may "trap" couples in already-troubled relationships because exiting such relationships is more difficult when outside options are reduced.[2] Third, the social isolation and economic uncertainty associated with COVID-19 likely act as additional stressors and worsen individuals' mental health (Altindag, Erten, and Keskin, forthcoming).

Consistent with these potential channels, our estimates indicate that social distancing led to a 7 percent increase in DV calls, and this effect remained significant until around April 15. This

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[1] Online Appendix B provides an overview of studies on the effects of the COVID-19 pandemic on DV.

[2] An additional complication arises if social restrictions decrease the ratio of female to male income. In fact, Alon et al. (2020) show that contrary to prior recessions, female unemployment increased more than male unemployment during the COVID-19 recession. A decline in women's economic conditions relative to their partners might increase the prevalence of DV by decreasing female bargaining power in the household.

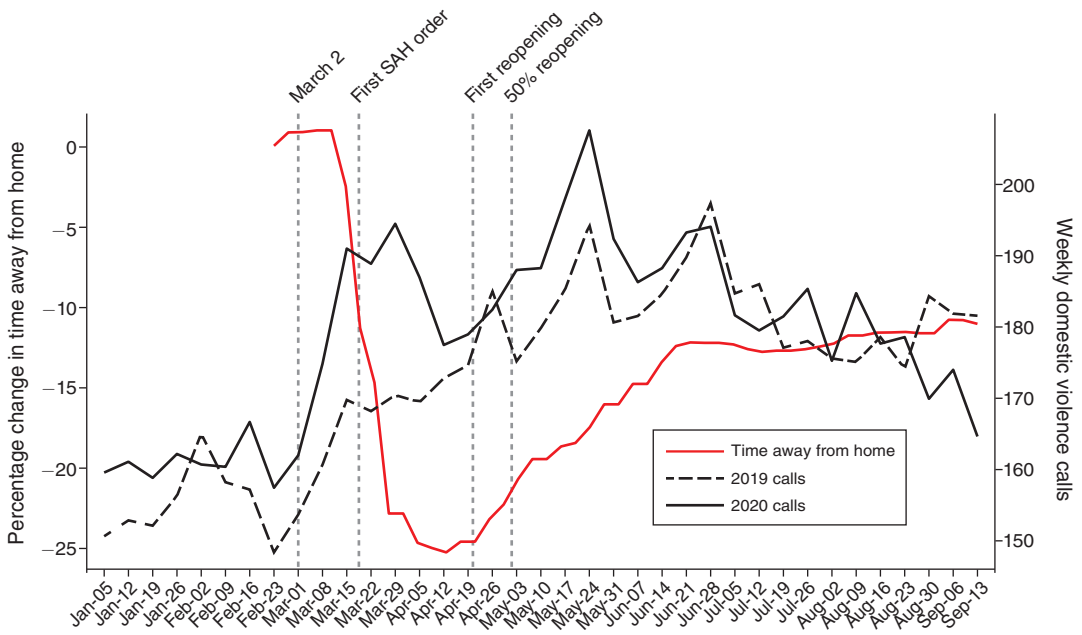

Figure 1. Trends in Domestic Violence Calls and Mobility in the US

Notes: The figure plots the average number of weekly DV calls across 31 cities by week of year for 2019 and 2020. The red line shows the average change in time spent outside of residential locations indexed to the period of January 3–February 6, 2020 as reported by the Economic Tracker, available at https://tracktherecovery.org/. The first vertical dashed line falls on the week of March 2, 2020, one week prior to the beginning of social distancing. The other vertical dashed lines represent the dates for first SAH orders implemented on March 19, for the first reopening of April 20, and for when 50 percent of cities in our sample began reopening their economies on May 1, 2020.

timing coincides with the distribution of the stimulus payments as part of the Coronavirus Aid, Relief, and Economic Security (CARES) Act by the US government.[3] Interestingly, when we link the DV calls to census tract demographic characteristics, we observe that in census tracts with a high concentration of Hispanics and noncitizens, DV calls to police remain high in 2020 relative to the corresponding 2019 rates even after the stimulus payments started. In contrast, we find no significant increase in DV calls in census tracts with a high share of Whites or Blacks after these cash transfers were delivered. We also find no significant changes in DV calls in lower-income or lower-education census tracts after the stimulus payments.

Our study reconciles some of the mixed findings in the growing literature on the effects of the COVID-19 crisis on DV. On the one hand, studies focusing on the first months of the lockdowns generally document stronger increases in DV reporting compared to those that encompass a longer time period. These differences can partly be accounted for by the gradual relaxation of government-imposed restrictions over time and the introduction of certain welfare programs that mitigated some of the initial earnings losses through cash transfers. On the other hand, it is possible that some of the null findings in the short- to medium-term analyses mask the heterogeneity in the effects of the COVID-19 crisis for different subpopulations. Borjas and Cassidy (2020) document that the adverse labor market effects of the crisis have disproportionately affected minorities and

[3]The CARES Act was signed into law on March 27, 2020, authorizing $300 billion in direct stimulus payments via Economic Impact Payments (EIPs) and additional unemployment insurance. The first EIPs were deposited in mid-April, two weeks after the CARES act was signed.

immigrants. Similarly, most welfare programs exclude noncitizen immigrants. Most notably, noncitizens were not eligible for the CARES Act benefits or national unemployment benefits (Bitler, Hoynes, and Whitmore Schanzenbach 2020). Our results support the view that access to safety net programs can relieve financial stress within the family and thereby decrease DV incidents following the initial spike.

We acknowledge that several other important events occurred around the same time period and that not all stimulus payments were received at the same time. Hence, there could be other factors driving these patterns, and our study only provides some suggestive evidence based on the concurrent timing of the CARES Act and national unemployment benefit payments.

I. Data

Our primary source of data is DV calls to police for service in the United States. We contacted more than 200 police departments to access open datasets. We added the police departments reporting to the Police Data Initiative to the data we obtained. This data collection effort yielded a sum of 31 police departments from January 2019 to September 2020. Online Appendix Table A1 provides a list of police departments in our dataset, including the observation period, the DV parsing terms, and the state-level dates of SAH orders and reopenings. These police departments provided data on individual calls with the geocode or address information needed to match the calls to census tracts.[4]

II. Empirical Strategy

We use a difference-in-difference (DID) specification to estimate the impact of social distancing and economic anxiety associated with the pandemic. Our model takes the following form:

$$
\begin{aligned}
(1)\quad y_{cdt} = {} & \beta_1 Mar9toSAH_{cdt} \\
& + \beta_2 SAHtoApr15_{cdt} \\
& + \beta_3 Apr15toReopening_{cdt} \\
& + \beta_4 Reopening_{cdt} \\
& + \gamma_c + \mu_t + \phi_{week} + \delta_{dow} + \epsilon_{cdt}.
\end{aligned}
$$

We consider the impacts of the COVID-19 pandemic on DV in four time periods between March 2020 and September 2020. First, Figure 1 shows a drastic decline in time spent away from home beginning March 9, 2020. Second, households began to receive the stimulus payments associated with the CARES Act in mid-April. Third, many states began to relax their SAH orders after the first wave of COVID-19 ended. In our model, y_{cdt} is the number of DV calls to police departments in city c on day d in year t; $Mar9toSAH_{cdt}$ is an indicator that takes value one if the day is after March 9 and before the SAH order issued for the state where city c is located; $SAHtoApr15_{cdt}$ is an indicator for the period between the implementation of SAH orders and April 15; $Apr15toReopening_{cdt}$ is an indicator of the period from April 15 to the reopening; $Reopening_{cdt}$ is an indicator for the period after the reopening; γ_c are city fixed effects (FE); μ_t denotes year FE; ϕ_{week} denotes week FE; and δ_{dow} denotes day-of-week FE. The sample covers the January to September period in both 2019 and 2020. The standard errors are clustered at the city level.

The inclusion of year FE controls for any macroeconomic shocks at the national level, whereas the week FE account for seasonal trends in DV. City FE control for any time-invariant heterogeneity across counties and enable us to examine within-city variation in DV calls. The cities that took early action in implementing more restrictive policies differ from others that were late in implementing such policies. However, as long as the outcome variables follow parallel trends prior to social distancing, our DID estimator provides a consistent estimate of the impact of social isolation on the risk of experiencing DV.

[4] Online Appendix Table A2 compares the cities in our dataset with the rest of the country using census tract characteristics in 2019. The normalized differences are below one-quarter for all demographic variables, indicating no systematic differences between two groups. Similarly, we do not see any systematic differences in the number of COVID-19 cases reported in our sample cities versus the remainder of the country from March to September 2020.

Table 1—Effects of Social Distancing on DV Calls during COVID-19

	Full sample	Above 75% share White	Below 25% share White	Above 75% share Black	Below 25% share Black	Above 75% Share Hispanic	Below 25% Share Hispanic	Above 75% Share noncitizen	Below 25% Share noncitizen
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
March 9 to SAH	0.020	0.008	0.027	0.023	0.004	0.032	0.005	0.034	0.009
	(0.005)	(0.005)	(0.011)	(0.009)	(0.005)	(0.007)	(0.007)	(0.006)	(0.006)
SAH to April 15	0.016	0.011	0.010	0.007	0.011	0.027	−0.002	0.029	0.011
	(0.006)	(0.005)	(0.010)	(0.010)	(0.005)	(0.008)	(0.004)	(0.010)	(0.006)
April 15 to reopening	−0.000	0.001	−0.016	−0.021	0.004	0.017	−0.019	0.020	−0.011
	(0.005)	(0.006)	(0.008)	(0.008)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Reopening	−0.003	−0.004	−0.002	−0.004	0.001	0.007	0.006	0.002	0.012
	(0.007)	(0.004)	(0.020)	(0.019)	(0.005)	(0.006)	(0.006)	(0.008)	(0.007)
Observations	2,064,427	482,260	549,720	583,763	446,188	517,452	594,540	500,100	569,073
Outcome mean	0.23	0.11	0.33	0.33	0.14	0.30	0.21	0.28	0.21

Notes: This table presents the DID estimates from equation (1) for census tracts above the 75 percentile and below the 25 percentile for shares of different demographic groups. Columns 2–3 report these estimates for shares of Whites, columns 4–5 report them for shares of Blacks, columns 6–7 report them for shares of Hispanics, and columns 8–9 report them for shares of noncitizens. The outcome is the daily number of DV service calls. Observations are at the census tract-by-day level for 31 cities.

III. Findings

Table 1 presents the DID estimates. Column 1 presents coefficient estimates for the complete sample. The estimates indicate that there was, on average, a 7 percent increase in DV calls from March 9 until April 15 and no significant changes in calls after April 15.[5,6] As described earlier, this timing also coincides with the distribution of stimulus payments associated with the CARES Act. This evidence suggests that such payments may have reduced DV-related police calls by alleviating economic anxiety. Our results are consistent with Chetty et al. (2020), who find that stimulus payments sharply increased household spending and nearly restored it to the consumption levels prior to COVID-19.

Table 1 also reports whether the effects of social distancing on DV calls vary by race, ethnicity, and citizenship status. We use the distribution of these demographic characteristics at the census tract level and compare census tracts above the 75 percentile and below the 25 percentile for the shares of Whites, Blacks, Hispanics, and noncitizens in the population. The DID estimates in columns 4, 6, and 8 show evidence of a significant increase in DV calls from March 9 to the SAH orders for census tracts where the shares of Blacks, Hispanics, and noncitizens in the population are above the 75 percentile. In contrast, column 2 estimates indicate no evidence of a significant increase in predominantly white areas.

Moreover, estimates in columns 6 and 8 of Table 1 show that the increase in DV calls from the SAH orders to April 15 for areas with high concentrations of Hispanics and noncitizens does not disappear in the aftermath of April 15. In contrast, estimates in columns 7 and 9 indicate no evidence of a significant change in DV calls for areas with low shares of Hispanic and noncitizen population from April 15 to reopening.[7,8,9]

[5] This effect size is close to the 9.7 percent increase estimated by Leslie and Wilson (2020) in the five weeks after social distancing began, although we consider a larger set of police departments.

[6] In online Appendix Table A3, we show that our results using more conservative standard errors obtained by the wild cluster bootstrap method are very similar.

[7] Online Appendix Table A4 shows that these results are robust for estimating a fully interacted model in which we interact year, week, and day-of-week FE with city FE.

[8] Online Appendix Table A5 explores heterogeneity by income, education and baseline DV-related calls before the pandemic. We find no evidence of significant differences by average income level and education. Interestingly, although the increase in DV calls for areas with high baseline DV calls prior to the pandemic are slightly higher before April 15, the effects disappear for both groups after April 15.

[9] Using an event-study specification, online Appendix Figure A1 shows no evidence of significant pretrends in DV calls from January until the first week of March before social distancing began.

IV. Discussion

Our results are important for the future policy discussion, as they highlight the importance of improved access to social safety net programs in combating domestic violence. It is a well-documented fact that noncitizens and undocumented immigrants suffered a double burden during the pandemic: not only did they disproportionately suffer from employment losses, but also, they could not obtain access to several social safety programs. Bitler, Hoynes, and Whitmore Schanzenbach (2020) report that undocumented immigrants did not receive unemployment benefits, and East, Hoynes, and Watson (2020) note that noncitizens are ineligible for unemployment insurance as well as almost all benefits, including the Supplemental Nutrition Assistance Program (SNAP) and stimulus payments under the CARES Act (i.e., EIPs and additional unemployment insurance). Moreover, the take-up of social safety programs has been relatively low among Hispanics, particularly in places where immigration enforcement programs have been strongly enforced (Alsan and Yang 2019). East, Hoynes, and Watson (2020) also note that food insecurity increased more among Hispanics than among Whites after the pandemic. Thus, it is not surprising that the government programs introduced around mid-April did not lead to significant declines in DV calls for areas with high concentrations of Hispanics and noncitizens given that these groups could not take advantage of most of the financial relief programs.

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