Short Abstract

This study tests the county-level association between opioid misuse and child maltreatment from 2002-2016 in the United States using the theoretical framework of social disorganization. The requisite variables are procured from multiple data sources including: American Community Survey (ACS), Center for Disease Control and Prevention (CDC), and National Child Abuse and Neglect Data System (NCANDS). I take advantage of a fixed effects analytic approach to nullify unmeasured time-invariant county-level variables to improve. This research extends social disorganization theory and improves our understanding of recent trends in opioid misuse and child maltreatment by explaining what county-level characteristics influence the association.

Extended Abstract

Mounting levels of opioid misuse are challenging the child welfare system in the United States. Opioid misuse is the use of opioids including prescription opioids — like morphine, oxycodone, hydrocodone, and methadone as well as heroin and fentanyl — that are prohibited by law, not authorized by a medical professional, or otherwise illicit. The Center for Disease Control and Prevention (CDC) estimates that more than half of a million people died from drug overdoses between 2002 and 2016, the majority of drug overdose deaths during that period are attributable to opioids, and the proportion has increased yearly (CDC Wonder). Over the same 15-year period, Child Protective Services (CPS) agencies in the United States handled more than 53.5 million child maltreatment reports. A child maltreatment report is generated after CPS receives and screens through referrals of child abuse and neglect (U.S. Department of Health & Human Services 2018b). The magnitude of drug overdose deaths and child maltreatment reports are overwhelming; but beyond raw numbers, the trends of drug overdose deaths and child maltreatment reports describe the increasing social burden and demonstrate the urgency of these swelling numbers. Drug overdose deaths more than tripled from approximately 21,000 in 2002 to almost 65,000 in 2016, while child maltreatment reports climbed 150% from about 2.8 million in 2002 to nearly 4.2 million in 2016, and the bulk of the growth in both trends has occurred since 2010.

Although deaths associated with opioid misuse and burdens on the child welfare system have risen in tandem in the last two decades and media outlets have noted their co-occurrence, researchers have not directly linked these trends. Media reports of the linkage between opioid overdose deaths and child outcomes primarily focus on the stories of individuals, such as the ensuing consequences for specific children when parents overdose (Leblanc 2018; Saslow 2016; Whalen 2016). It is rarer that media outlets address the broader societal contexts in which such events co-occur, although some have remarked on the similarities of the trends (Birnbaum and Lora 2018). Policy research, primarily conducted by branches of the United States Federal Government, has more directly established links between trends in foster care placement and drug overdose deaths by noting their spatial co-occurrence in counties in addition to their temporal co-occurrence at the national level (U.S. Department of Health and Human Services 2018a) but such work is limited by its lack of theoretical frame or understanding within a social context, and its reliance on foster care entries rather than child maltreatment reports. One explanation for the limitations of prior work on this topic, and perhaps a source of its general lack of scholarly attention, is the constraints in available data. Specifically, Ford, Sacra, and Yohros (2017) argue that data pertaining to opioid misuse typically lack geographic identifiers which is a substantial barrier to research on the topic. More research taking advantage of geographic identifiers would allow researchers to better understand recent trends in opioid misuse and child maltreatment and policy makers would have a better opportunity to enact changes to influence those trends.

Social disorganization theory explains why spatial context is central to any relationship between opioid misuse and child maltreatment. The core premise of social disorganization theory is that the disruption of local social organization can account for increases in crime and

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delinquency (Shaw and McKay 1942). Social organization is the ability of a community structure to grasp the standards of local residents and maintain those standards socially (Sampson 1991), which contemporary researchers argue can be disrupted by three factors: economic status, residential mobility, and urbanization.

Using county-level data from the American Community Survey (ACS), the CDC, and National Child Abuse and Neglect Data System (NCANDS), I test the associations between drug overdose deaths (as a proxy for opioid misuse) and child maltreatment reports (as a proxy for child maltreatment) within the theoretical framework of social disorganization theory. Preliminary associations (Figure 1. shown below) suggest that there is a positive relationship between county-level drug overdose rates and county-level child maltreatment reports per capita in the United States from 2002-2016. In this study, I ask the following research questions: 1) what is the correlation between county-level opioid overdose deaths and child maltreatment reports? 2) Is there evidence that opioid misuse is a determinant of the increase in child maltreatment reports? And 3) does social disorganization explain these relationships? I leverage both spatial and temporal discontinuities in rates of drug overdose deaths and child maltreatment reports to establish their links with one another and with other factors associated with social disorganization, including residential mobility, economic status, and urbanization. I use a fixedeffects approach to test the association between child maltreatment and opioid misuse and to what extent the relationship is influenced by context of counties. Using fixed-effects is valuable because I will be able to examine the affect of a county context on opioid misuse and child maltreatment without having to consider specific local policies or other unmeasured, timeinvariant-variables that pertain to counties; in essence they will be cancelled out or fixed using this analytic strategy. An advantage of my focus on counties is that CPS agencies are organized

at the county-level, which means that my findings will be pertinent to CPS agencies and county-level governments. Exploring the relationship between child maltreatment and opioid misuse extends the application of social disorganization theory to new county-level variables and advances our understanding of this social problem with the possibility of affecting policy change because of policy makers' influence over the components of social disorganization theory such as residential mobility, and economic status.

County-level Association: Drug Overdose Deaths and Child Maltreatment Reports
United States 2002-2016

Output

Figure 1.

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