



Sleep Problems among Mothers of Youth Stopped by the Police

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Abstract Police stops are the most common form of criminal justice exposure in the USA, and are particularly common among urban youth, with 23% of them reporting a stop by the age of 15. While recent work has begun to illuminate the health impacts of police stops for these youth, little is known about the health consequences of youth police contact for the mothers of youth stopped by the police. The current study employs data from the Fragile Families and Child Wellbeing Study (FFCWS), a sample of urban, at-risk youth and their families. Multivariate logistic regression models are conducted to examine the link between youth police stops and sleep difficulties among mothers. Additional analyses examine whether the features and consequences of police stops are associated with sleep difficulties among mothers. The findings indicate that mothers with youth who have experienced police stops are more than twice as likely to report both depression- and anxiety-related sleep difficulties compared to their counterparts. Furthermore, stops with certain features—including those characterized by intrusiveness, high trauma, and high stigma—emerged as consistently significant predictors of maternal sleep difficulties. The findings suggest that mothers who are vicariously exposed to police contact via their children are a vulnerable group. Given the non-random distribution of police

contact across the population of youth, with police contact concentrated among children of color, the findings suggest that police contact may exacerbate racial inequalities in sleep, which may itself contribute to racial disparities in broader mental and physical health outcomes.

Keywords Police contact · Mothers · Sleep · Trauma · Stigma · Intrusiveness

Police contact, much of which occurs in the form of police stops, is the most frequent form of criminal justice exposure in the USA. The rise in proactive policing strategies, whereby police officers stop individuals to detect criminal activity, means that in 2018, nearly 29 million individuals experienced involuntary police contact [11, 17]. First exposure to police contact often occurs in adolescence, with 23% of urban youth reporting a police stop by age 15 [7]. Police stops are unequally distributed across the population of youth, with male youth, youth of color, and youth living in high-poverty neighborhoods especially likely to experience stops [7].

A growing literature documents the health consequences of youth police contact, with youth exposed to police stops experiencing worse self-reported health [21] and more symptoms of depression, anxiety, and post-traumatic stress disorder (PTSD) than youth not exposed to police stops [1, 7, 9, 13, 15, 26, 27, 30]. Youth exposed to police stops also experience more sleep problems than their counterparts [14].

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However, little is known about the health consequences of youth police contact for the mothers of youth stopped by the police (though see [29]). This is somewhat surprising, given extant research revealing that other forms of criminal justice contact (e.g., incarceration) can have spillover effects on maternal health [10, 28]. Furthermore, there are theoretical reasons to expect that the stressor of a youth police stop would impair aspects of mothers' health including their sleep. Broadly speaking, there is ample research suggesting that maternal sleep worsens when mothers experience significant worry and/or stress pertaining to the health and wellbeing of their offspring [4, 6, 22–24]. In the case of adolescent police stops specifically, mothers may experience sleep problems because they are ruminating about the police encounter, which may have been characterized by officer intrusiveness in the form of frisks, physical violence, and racial slurs. Mothers of youth stopped by the police may also experience sleep problems stemming from the perceived or actual adverse consequences of the stop for their child, such as social stigma, negative attitudes toward the police, decreased employment prospects, reduced political participation and engagement with institutions, and impaired physical and mental health [1, 2, 8, 13, 20, 26]. Furthermore, given the differences in the prevalence of the police contact among boys and girls, mothers of boys may react differently than mothers of girls.

In this paper, we use data from the Fragile Families and Child Wellbeing Study (FFCWS), a cohort of children (and their parents) born around the turn of the twenty-first century, to examine the consequences of youth police stops for mothers' depression- and anxiety-related sleep problems. After calculating descriptive statistics, we examine the relationship between youth police stops and mothers' sleep problems. We adjust for an array of demographic, socioeconomic, and behavioral characteristics associated with both youth police stops and mothers' sleep problems, particularly important given non-random selection into police stops. We also examine how four aspects of police stops—number of stops, intrusiveness of stops, youth-reported stigma stemming from stops, and youth-reported trauma stemming from stops—are associated with mothers' sleep problems. In a set of ancillary analyses, we explore these associations separately for mothers of male youth and mothers of female youth. These findings suggest that youth police stops have vicarious consequences for youth's mothers and, in

doing so, shed light on the social determinants of sleep problems, an often overlooked yet important indicator of health [3, 12, 19].

Methods

We examine the association between youth police stops and mothers' sleep difficulties using the Fragile Families and Child Wellbeing Study (FFCWS). The FFCWS is a longitudinal study of 4,898 children born in urban areas between 1998 and 2000 (baseline) and followed over an additional five waves of data collection (year 1 (Y1), 3 (Y3), 5 (Y5), 9 (Y9), and 15 (Y15)). The last wave was collected between 2014 and 2017, when youth were about 15 years old. The FFCWS sample was obtained through a multi-staged, clustered sampling procedure. A stratified random sample of 20 US cities was chosen from a population of cities with 200,000 or more residents. Subsequently, 75 hospitals were selected within these 20 cities, followed by a random sample of couples who had just given birth (with unmarried couples being oversampled). The resultant sample includes a large number of families at risk of adversity, including criminal justice contact and sleep difficulties, making them well-suited to the present investigation. For the current study, the sample was restricted to cases in which the biological mother was the primary caregiver respondent at Y15 (88%) and data on maternal sleep and maternal- and youth-reported youth police stops were available ($N = 3,019$).

Maternal Sleep Difficulties

The dependent variables are *depression-related sleep difficulties* and *anxiety-related sleep difficulties*, both self-reported by mothers at Y15. The items come from responses to the CIDI-SF diagnostic instrument used to measure, among other things, major depressive disorder and generalized anxiety disorder [16]. Within the context of these instruments, mothers were asked whether they experienced difficulty sleeping during the past year.

The first instance mothers were asked about sleep was after reporting that, during the 12 months prior to the interview, there had been a time when (1) they felt sad, blue, or depressed for at least 2 weeks or (2) they had lost interest in most things that are usually pleasurable. Mothers responding affirmatively to at least one of

these questions were asked to think of a 2-week period during the past 12 months when those feelings were the worst, and were then asked the following: "Did you have more trouble falling asleep than you usually do during those two weeks?" Mothers responding affirmatively were assigned a value of 1 on the *depression-related sleep difficulties* item, whereas all other mothers were assigned a value of 0.

The second instance mothers were asked about sleep was after reporting that, during the 12 months prior to the interview, they experienced a period of 1 month or longer when they felt worried, tense, or anxious most of the time. Mothers responding affirmatively were asked whether they had trouble falling asleep or staying asleep during that time. Mothers responding affirmatively were assigned a value of 1 on the *anxiety-related sleep difficulties*, whereas all other mothers were assigned a value of 0.

Youth Police Stops

Mothers and youths were asked about youth police stops at Y15. Mothers were asked, "Has {YOUTH} ever been stopped by the police while on the street, at school, in a car, or some other place?" Youth were asked, "Have you ever been stopped by the police while on the street, at school, in a car, or some other place?" Only youth were asked follow-up details about police stops. Given our interest in exploring these details (described below), while also validating mothers' awareness of youth stops, we assigned cases a value of 1 when both the mother and youth reported the youth was stopped.

Intrusiveness of Police Stop

Youth were asked follow-up questions about the intrusiveness of the stop (or, for youth with multiple stops, the intrusiveness of their most salient encounter). They were asked if they experienced the following from the police officer: frisked them/patted them down, searched their bags/pockets, used harsh language, used racial slurs, threatened physical force, or used physical force. We create mutually exclusive binary variables to examine intrusiveness: no stop (reference), stop with intrusiveness, and stop without intrusiveness. Frisking and searching were the most commonly experienced forms of intrusion (80% and 86% of cases where intrusion was reported, respectively). Therefore, we also examined the consequences of stops with frisks (no stop [reference],

stop with frisk, stop without frisk) and stops with searches (no stop [reference], stop with search, stop without search) for maternal sleep difficulties.

Youth Stigma Following Police Stop

We examined the role of youth stigma following the police stop in maternal sleep difficulties. The survey states, "Please tell me whether you agree or disagree with each of the following statements about things that have happened since you were stopped by the police." Items include the following: (1) your friends have treated you with more respect (reverse coded), (2) people have avoided you, (3) people have used the fact that you were stopped to hurt your feelings, (4) people have been less willing to help you in your everyday life, (5) you sometimes avoid people because you think they might look down on you, (6) people are more uncomfortable around you, (7) you sometimes hide the fact that you were stopped from your friends and family, (8) you think it is a good idea to keep your past experiences with the police a secret, (9) you would advise a friend who had been stopped by the police not to tell others about it, (10) you wait until you know someone well to tell them about your past experiences with the police, and (11) you would be less likely to apply for a job if you know that the employer would ask about your past experiences with the police. We summed these items to create a count of stigma following the police stop. We create mutually exclusive binary variables to examine stigma: no stop (reference), stop with high social stigma (youth scoring at or above the mean stigma value), and stop with low social stigma (youth scoring below the mean stigma value).

Youth Trauma Following Police Stop

We examined the role of youth trauma following the police stop in maternal sleep difficulties. Items assessing youth's trauma since being stopped by the police include the following: (1) remembering this experience brings back your feelings about having been stopped, (2) other events in your life cause you to think about this experience with the police, (3) you think about having been stopped even when you do not mean to, (4) pictures of this incident sometimes pop into your mind, (5) you try not to remember and think about this incident, (6) your feelings about this incident are kind of numb, (7) you try to remove the time you were stopped from

your memory, (8) you try not to talk about the time you were stopped, and (9) reminders of the time you were stopped cause you to have physical reactions such as sweating, trouble breathing, nausea, or a pounding heart. We summed these items to create a count of trauma following the police stop. We create mutually exclusive binary variables to examine trauma: no trauma (reference), stop with high trauma (youth scoring at or above the mean trauma value), and stop with low trauma (youth scoring below the mean trauma value).

Covariates

Covariates include the following: self-reported child delinquency (Y9), mother impulsivity (based on the abbreviated form of Dickman's [5] impulsivity scale; Y3), child sex (Y15), child age (Y15), mother's race (baseline; black, Hispanic, other, white (reference)), mother's age (Y9), mother's education (Y9; less than high school (reference), high school, more than high school), mother employed (Y9; mother worked for pay in the past week), mother household income (Y9; an income-to-poverty ratio measure based on federal poverty guidelines and household composition; income-to-poverty ratio < 0.50 (reference), income-to-poverty ratio 0.50–0.99, income-to-poverty ratio 1.00–1.99, income-to-poverty ratio 2.00–2.99, income-to-poverty ratio ≥ 3.00), material hardship (Y9), mother relationship status with youth's father (Y9; married, cohabiting, other relationship status (reference)), mother parenting stress (Y9), father incarceration (Y9), mother neighborhood social disorganization (Y9), mother poor/fair health (Y9), and mother depression (Y9).

Analytic Plan

The analysis proceeded as follows. First, we calculated descriptive statistics. Second, we assessed the bivariate association between youth police stops and maternal depression- and anxiety-related sleep difficulties. Third, we examined the relationship between youth police stops and maternal sleep difficulties with logistic regression models. Importantly, given the non-random nature of police stops, we adjust for an array of characteristics associated with this type of criminal justice contact, including race/ethnicity, youth delinquency, and neighborhood conditions. To explore variability in findings by stop characteristics and consequences, we also

considered (1) the number of stops (no stop, single stop, multiple stops), (2) stop intrusiveness (no stop, stop with intrusiveness, stop without intrusiveness), (3) frisking (no stop, stop with frisk, stop without frisk), (4) searching (no stop, stop with search, stop without search), (5) social stigma (no stop, stop with high social stigma, stop with low social stigma), and (6) trauma (no stop, stop with high trauma, stop with low trauma). We also conducted ancillary analyses stratifying the sample by sex, given the sex disparity in youth police stops (11.58% of males vs. 3.64% of females; *t* statistic: 8.28; *p* < 0.001). Multiple imputation was employed for all analyses (STATA 16.1, chained equations).

Results

The descriptive results displayed in Table 1 suggest that 14.14% of mothers report depression-related sleep difficulties and 11.03% of mothers report anxiety-related sleep difficulties. Furthermore, 7.72% of youth and their mothers both report the youth had been stopped by the police at least once (with most stopped youth experiencing multiple stops). Intrusive stops are more common than stops without intrusiveness (4.87% vs. 2.85%).

Next, we examined the bivariate relationship between youth police stops and maternal depression- and anxiety-related sleep difficulties. The findings, displayed in Fig. 1, reveal that though 13.17% of mothers of youth with no police stops report depression-related sleep difficulties, 28.69% of mothers of youth stopped by the police report such sleep difficulties. Similarly, though 10.11% of mothers of youth with no police stops report anxiety-related sleep difficulties, 21.65% of mothers of youth stopped by the police report such sleep difficulties. Thus, the bivariate patterns suggest an association between youth police stops and maternal sleep difficulties.

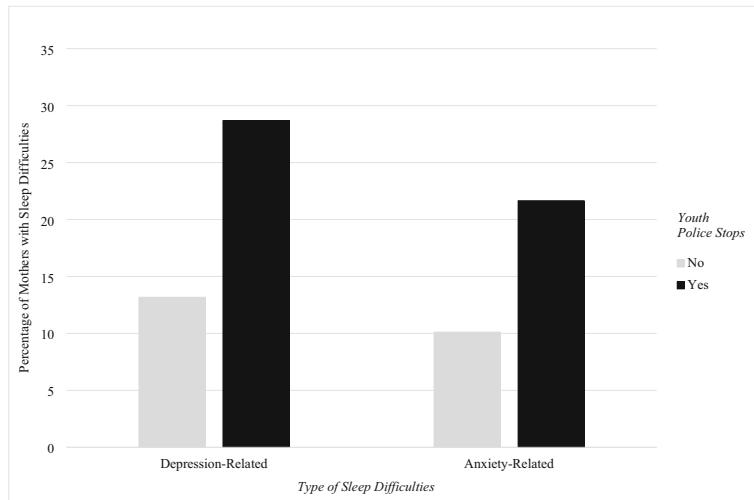
Table 2 employs logistic regression to assess the association between youth police stops and maternal sleep difficulties, net of covariates. Results indicate three key conclusions. First, youth police stops are significantly associated with a 69% increase in the odds of mothers' depression-related sleep difficulties ($OR = 1.69$; $CI = 1.20\text{--}2.39$) and a 79% increase in the odds of mothers' anxiety-related sleep difficulties ($OR = 1.79$; $CI = 1.24\text{--}2.60$). In additional auxiliary analyses, we found that the relationship between youth police stops and mother's depression- and anxiety-related sleep problems did not significantly vary across racial/ethnic

Table 1 Descriptive statistics ($N = 3,019$)

Variables	Mean/%	SD	Range
Maternal sleep difficulties			
Depression-related (Y15)	14.14%	-	0–1
Anxiety-related (Y15)	11.03%	-	0–1
Youth police stop variables			
Any stops (Y15)	7.72%	-	0–1
Single stop (Y15)	2.59%	-	0–1
Multiple stops (Y15)	5.13%	-	0–1
Stop with intrusiveness (Y15)	4.87%	-	0–1
Stop without intrusiveness (Y15)	2.85%	-	0–1
Stop with frisk (Y15)	4.24%	-	0–1
Stop without frisk (Y15)	3.48%	-	0–1
Stop with search (Y15)	4.44%	-	0–1
Stop without search (Y15)	3.28%	-	0–1
High social stigma (Y15)	2.62%	-	0–1
Low social stigma (Y15)	5.10%	-	0–1
High trauma (Y15)	2.98%	-	0–1
Low trauma (Y15)	4.74%	-	0–1
Covariates			
Self-reported child delinquency (Y9)	1.25	1.77	0–17
Mother impulsivity (Y3)	2.01	0.61	1–4
Child sex (male = 1) (Y15)	50.78%	-	0–1
Child age (Y15)	15.57	0.75	14–19
Mother Black (baseline)	51.87%	-	0–1
Mother Hispanic (baseline)	24.84%	-	0–1
Mother white (baseline)	19.61%	-	0–1
Mother other race (baseline)	3.68%	-	0–1
Mother's age (Y9)	34.70	6.01	23–57
Mother less than high school (Y9)	19.94%	-	0–1
Mother graduated high school (Y9)	20.83%	-	0–1
Mother more than high school (Y9)	59.26%	-	0–1
Mother employed (Y9)	63.89%	-	0–1
Income-to-poverty ratio < 0.50 (Y9)	16.21%	-	0–1
Income-to-poverty ratio 0.50–0.99 (Y9)	19.64%	-	0–1
Income-to-poverty ratio 1.00–1.99 (Y9)	29.51%	-	0–1
Income-to-poverty ratio 2.00–2.99 (Y9)	14.14%	-	0–1
Income-to-poverty ratio ≥ 3.00 (Y9)	20.50%	-	0–1
Material hardship (Y9)	1.49	1.94	0–11
Mother married to focal father (Y9)	30.67%	-	0–1
Mother cohabiting with focal father (Y9)	9.57%	-	0–1
Mother non-residential/no relationship with focal father (Y9)	59.76%	-	0–1
Mother parenting stress (Y9)	2.03	0.69	1–4
Father incarceration (Y9)	49.75%	-	0–1
Mother neighborhood social disorganization (Y9)	2.05	0.72	1–5
Mother poor/fair health (Y9)	16.19%	-	0–1
Mother depression (Y9)	11.43%	-	0–1

Notes: baseline = measured at baseline survey; Y3 = measured at 3-year survey; Y9 = measured at 9-year survey; Y15 = measured at 15-year survey.

Fig. 1 The percentage of mothers with depression- and anxiety-related sleep difficulties, stratified by youth police stops



groups. Both a single incident ($OR = 2.12$; $CI = 1.23\text{--}3.67$) and multiple incidents ($OR = 1.52$; $CI = 1.01\text{--}2.30$) are significantly associated with depression-related sleep difficulties. The same is the case with anxiety-related sleep difficulties (single stop: $OR = 1.86$; $CI = 1.02\text{--}3.40$; multiple stops: $OR = 1.78$; $CI = 1.14\text{--}2.75$).

Second, there is a positive and statistically significant association between stop intrusiveness and maternal sleep difficulties, whereas non-intrusive stops are not significantly associated with maternal sleep difficulties. Specifically, relative to mothers of youth with no stops, mothers of youths with intrusive police stops experienced a 74% increase in the odds of depression-related sleep difficulties ($OR = 1.74$; $CI = 1.14\text{--}2.65$) and a 123% increase in the odds of anxiety-related sleep difficulties ($OR = 2.23$; $CI = 1.44\text{--}3.45$). Mothers of youth stopped without intrusion were not significantly more likely to manifest depression- or anxiety-related sleep difficulties than mothers of youth with no stops. Similar patterns emerged in stops involving frisks (depression-related: $OR = 1.70$; $CI = 1.04\text{--}2.78$; anxiety-related: $OR = 2.40$; $CI = 1.51\text{--}3.79$) and stops involving searches (depression-related: $OR = 1.81$; $CI = 1.17\text{--}2.81$; $OR = 2.28$; $CI = 1.44\text{--}3.60$). Stops without frisks ($OR = 1.69$; $1.08\text{--}2.64$) were also associated with increases in mothers' depression-related sleep difficulties.

Third, both stigma and trauma stemming from the stop are associated with depression-related and anxiety-related maternal sleep difficulties. Relative to mothers of youth with no stops, high levels of stigma were associated with a 102% increase in the

odds of depression-related sleep difficulties ($OR = 2.02$; $CI = 1.16\text{--}3.51$) and a 146% increase in the odds of anxiety-related sleep difficulties ($OR = 2.46$; $CI = 1.40\text{--}4.33$). Similarly, relative to mothers of youth with no stops, high levels of trauma stemming from the stop were associated with a 114% increase in the odds of depression-related sleep difficulties ($OR = 2.14$; $CI = 1.30\text{--}3.55$) and a 70% increase in the odds of anxiety-related sleep difficulties ($OR = 1.70$; $CI = 1.01\text{--}2.96$). By comparison, stops with low stigma or trauma were not consistently associated with maternal sleep difficulties (relative to mothers of youth with no stops).

In ancillary analyses, we explored the association between youth police stops and maternal sleep difficulties by youth sex (see [Appendix](#)). In general, the findings indicate that female youth stops were positively associated with depression-related maternal sleep difficulties, whereas male youth stops were positively associated with anxiety-related maternal sleep difficulties. These findings held across single and multiple stops for female youth. Among male youth, however, they only retained statistical significance in the case of multiple police stops. Furthermore, in the case of male youth, only intrusive stops were associated with anxiety-related maternal sleep difficulties, whereas both intrusive and non-intrusive stops among female youth were associated with depression-related sleep difficulties among mothers. These findings among males also emerged in the case of both frisking and searching.

Table 2 The association between youth police stops and maternal sleep difficulties ($N = 3,019$)

	Maternal sleep difficulties	
	Depression-related	Anxiety-related
Youth police stops (reference = no stops)	OR (CI)	OR (CI)
Any stops	1.69** (1.20–2.39)	1.79** (1.24–2.60)
Number of stops (reference = no stops)		
Single	2.12** (1.23–3.67)	1.86* (1.02–3.40)
Multiple	1.52* (1.01–2.30)	1.78** (1.14–2.75)
Youth police stops (reference = no stops)		
Any intrusiveness	1.74** (1.14–2.65)	2.23** (1.44–3.45)
No intrusiveness	1.62 (0.94–2.79)	1.19 (0.63–2.24)
Youth police stops (reference = no stops)		
Frisk	1.70* (1.04–2.78)	2.40** (1.51–3.79)
No frisk	1.69* (1.08–2.64)	1.20 (0.67–2.14)
Youth police stops (reference = no stops)		
Search	1.81** (1.17–2.81)	2.28** (1.44–3.60)
No search	1.55 (0.94–2.58)	1.28 (0.72–2.27)
Youth police stops (reference = no stops)		
High social stigma	2.02* (1.16–3.51)	2.46** (1.40–4.33)
Low social stigma	1.55* (1.02–2.34)	1.50 (0.95–2.37)
Youth police stops (reference = no stops)		
High trauma	2.14** (1.30–3.55)	1.70* (1.01–2.96)
Low trauma	1.44 (0.92–2.24)	1.87** (1.18–2.95)

OR, odds ratio; CI, confidence interval. Covariates not shown to conserve space. Models use multiply imputed data ($N = 3,019$). Covariates include self-reported child delinquency (Y9), mother impulsivity (Y3), child sex (Y15), child age (Y15), mother race (baseline; black, Hispanic, other, with white as reference category), mother age (Y9), mother education (Y9; high school, more than high school, with less than high school as reference category), mother employed, mother household income (Y9; income-to-poverty ratio 0.50–0.99, income-to-poverty ratio 1.00–1.99, income-to-poverty ratio 2.00–2.99, income-to-poverty ratio ≥ 3.00 , with income-to-poverty ratio < 0.50 as reference category), mother material hardship (Y9), mother relationship status (Y9; married to focal father, cohabiting with focal father, with non-residential/no relationship as reference category), mother parenting stress (Y9), father incarceration (Y9), mother neighborhood social disorganization (Y9), mother poor/fair health (Y9), and mother depression (Y9).

* $p < 0.05$

** $p < 0.01$

Discussion

A burgeoning line of research documents the negative health repercussions of youth police contact [1, 7, 9, 13–15, 27, 30]. In particular, the mental health consequences of police contact are especially pronounced when stops are characterized by officer intrusiveness [13], with recent research suggesting that such stops can impair youth sleep quality [14]. Despite these findings, in conjunction with other research showing criminal justice contact can have spillover repercussions for mothers [10, 28, 31], scholars have only begun to explore the spillover health consequences of youth police

contact for the mothers of stopped youth [29]. The current study expands upon extant work, providing the first examination of sleep difficulties among mothers whose adolescent children experienced police encounters. The study yielded four key findings.

First, bivariate findings reveal that mothers with youth who have experienced police stops are more than twice as likely to report both depression- and anxiety-related sleep difficulties compared to their counterparts. Second, multivariate analyses reveal these associations withstand adjusting for a number of potential confounds. Third, stops with certain features—including those characterized by intrusiveness, high trauma, and

high stigma—emerged as consistently significant predictors of maternal sleep difficulties. Finally, ancillary sex-stratified models reveal a pattern where female youth stops are positively associated with depression-related maternal sleep difficulties, whereas male youth stops are positively associated with anxiety-related maternal sleep difficulties. Elevations in anxiety-related sleep difficulties among mothers of boys stopped by the police may be due to salience and conspicuousness of boys' impulsive, risk-taking behaviors that may provoke more immediate worry and concern of imminent danger in the forms of arrest or even fatal violence by police. Conversely, depression-related sleep difficulties among mothers of girls stopped by the police may be triggered by sadness rooted in diminished hope for the long-term prospects or life chances of daughters involved in the criminal justice system. Future qualitative research is needed to explore these processes further.

These findings have implications for public health policy and practice. Perhaps most importantly, these findings suggest that mothers who are vicariously exposed to police contact, via police contact of their children, are a vulnerable group. Therefore, physicians—especially those in communities where police stops are common—may consider screening for vicarious criminal justice contact. Physicians in these communities should screen for sleep difficulties among those reporting vicarious criminal justice contact—particularly those reporting vicarious criminal justice contact that is invasive, stigmatizing, or traumatic—and help patients develop strategies to minimize sleep difficulties. Given our somewhat disparate findings by youth sex, it may be worthwhile for physicians treating women with children stopped by the police to take offspring sex into account when screening for anxiety- and/or depression-related sleep difficulties. Furthermore, to the extent that shifts in policing might reduce the odds of future intrusive police-youth interactions, strategies to improve police-community relations—through community policing and other related initiatives—may hold promise for improving sleep outcomes among mothers of youth stopped by the police [25].

Although the current study is the first to examine sleep difficulties among mothers of youth stopped by the police, it is not without limitations. First, despite adjusting for a number of relevant confounders, it

remains possible that selection into police stops is not fully accounted for by our modeling strategy, given that police stops are not random phenomena. Second, the measurement of sleep difficulties may underestimate the prevalence of sleep problems in the sample, since they are asked in the context of mental health symptomatology. In short, there may be mothers in the sample with sleep problems who were not asked these questions about sleep, implying our results are likely conservative. Third, we restrict cases to those where both youth and mother confirm youth police stops. This is a conservative measure of youth police stops, but was nonetheless chosen to utilize key, youth-reported information concerning the details of the stop (e.g., intrusiveness, stigma, trauma). Fourth, a limited number of females reported police stops, and even fewer who experienced intrusive stops, making these ancillary sex-stratified findings subject to error. Fifth, the findings are not strictly generalizable to the US population of youth, given that the urban sample of youth was born to mostly unmarried couples. Still, these youth are particularly likely to experience police stops and are therefore a relevant population for this line of research inquiry. Finally, we did not have data that facilitated estimates of the association between youth police contact and fathers' sleep problems. Future research using alternative data sources should pursue this valuable line of inquiry.

Research on police contact has examined the physical and mental health consequences that stem from youth police contact [9, 13–15, 30]. Much less research has considered how the health consequences of police contact may proliferate to the mothers of youth who experience police contact, a particular oversight given the strong bonds between parents and children and other research documenting spillover consequences of other types of criminal justice contact such as incarceration [10, 28]. The current findings show that police contact—particularly invasive, stigmatizing, and traumatic police contact—has repercussions for the sleep of mothers of youth who experience such contact. Given the non-random distribution of police contact across the population of youth, with police contact concentrated among children of color [7], the findings suggest that police contact may exacerbate racial inequalities in sleep [12], which may itself contribute to racial disparities in broader mental and physical health outcomes [18].

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