

Association of CPS Post-Response Daycare Services with Child Physical Abuse Recidivism

Caitlin Elise Crumm

A thesis

submitted in partial fulfillment of the
requirements for the degree of

Master of Science

University of Washington

2021

Committee:

Mary Kernic

Rebecca Wiester

Program Authorized to Offer Degree:

Department of Epidemiology

@Copyright 2021
Caitlin Elise Crumm

University of Washington

Abstract

Association of CPS Post-Response Daycare Services with Child Physical Abuse Recidivism

Caitlin Elise Crumm

Chair of the Supervisory Committee:

Mary Kernic

Department of Epidemiology

Introduction: Provision of services to families is a tool used by child welfare agencies after child maltreatment is reported, with an intention of preventing future child maltreatment reports. Little is known about the effectiveness of individual services in preventing child physical abuse recidivism.

Methods: A retrospective cohort study was performed of data from 23 states contributing information to the National Child Abuse and Neglect Dataset System (NCANDS) for federal fiscal year 2014-2018.

Children entered the study cohort at time of first physical abuse intake and were followed for further child physical abuse intakes and service provision until the end of the study period.

Results: Overall analysis was performed of 499,199 unique children. The incidence rate of future child physical abuse intakes was lower after children were exposed to daycare services versus not exposed (adjusted Incidence Rate Ratio: 0.725, 95% Confidence Interval 0.674, 0.779). Analysis did not suggest that any exposure to domestic violence over the study time period modified the association of daycare and future physical abuse intakes.

Conclusions: Provision of daycare services was associated with a lower incidence rate of future physical abuse intakes in children after entry into the CPS system for physical abuse concerns.

Introduction

Dr. Kempe presented one of the earliest publications of child abuse prevention in 1978.¹ In exploring possible solutions to child abuse, he focused on parent/child bonding, and the role of the pediatrician in fostering this relationship. Since that time, many clinicians and researchers have attempted to determine how to prevent child maltreatment. Preventive interventions, including those targeting child maltreatment, are traditionally separated into three distinct levels. *Primary prevention* efforts are focused on preventing child maltreatment in the general population. *Secondary prevention* efforts typically target families either at high risk of child maltreatment or with a pre-existing history of child maltreatment with the aim of preventing future occurrences of child maltreatment. Finally, *tertiary prevention* efforts aim to mitigate the adverse consequences of child maltreatment on its victims.² The high rates of reported child abuse and neglect necessitate excellent research into response strategies to prevent recidivism. Large primary prevention campaigns may be expensive to implement. With limited funds available for prevention, programs that target higher risk families, such as those with previous abuse reports, may have a better impact in preventing child abuse and neglect.

Child Protective Services (CPS) is the United States governmental agency responsible for investigating and responding to child abuse and neglect. A CPS intake is a report made to CPS by someone in the community regarding concern for child abuse and neglect. One possible response by CPS to prevent first or future occurrences of child maltreatment is the provision of needed services to the reported family. These services are intended to address the many resource needs (e.g., childcare, basic housing, and food/nutritional support) that contribute to risk of child abuse or neglect. Provision of such services are intended to lower the risk of child maltreatment. Few studies have descriptively examined whether specific CPS services are effective in preventing subsequent maltreatment. The studies that have examined this issue have shown mixed results.³⁻¹¹

The National Child Abuse and Neglect Data System (NCANDS) was created as a voluntary national data collection as part of the 1988 Child Abuse Prevention and Treatment Act (CAPTA) amendments. States receiving funding through the Basic State Grant program are asked to work with the U.S. Department of Health and Human Services (HHS) to provide specific data. NCANDS data is published annually and details all reports of child abuse and neglect ("CPS intakes") made in each state,

with further information about family psychosocial factors, investigation information, and information about response and services provided to the family. Historical reviews of NCANDS data have suggested that offering of post-investigation services is not associated with decreased risk of subsequent child maltreatment,^{3,8} however, these studies were limited by significant (>50%) missing data in service categories. Furthermore, more recent analyses are lacking in specificity, and some even suggest increased risk of general child maltreatment recurrence with certain services such as counseling services, but decreased risk with other services, such as transportation services.⁴

Intimate partner violence (IPV, coded as “domestic violence” by NCANDS) is known to be associated with re-reports and recurrence of child maltreatment,^{7,12} so examining whether IPV modifies the association of post-response services with child abuse recidivism is of particular interest. IPV has been found to related to parent perception of a child's social and emotional problems, as well as parent-reported frustration, helplessness, and fear, which can lead to maladaptive parenting behaviors.¹³ Meeting tangible needs with post-response services could theoretically decrease overall stress, and by extension, parenting stress, interrupting an IPV and child maltreatment cycle.

The primary aim of this study was to examine whether provision of daycare services, one specific service offered by CPS to at-risk families, was associated with decreased rates of subsequent child physical abuse among children with an initial report of child physical abuse. Secondly, our study examined whether this association was moderated by co-occurring domestic violence. It was hypothesized that daycare services would be associated with lower rates of subsequent child physical abuse reports, and that co-occurring domestic violence would modify this association.

Methods

This retrospective cohort study used data from 2014-2018 NCANDS data sets. NCANDS data represent all CPS intakes made in the United States for children less than 18 years of age, and the 2014-2018 data represent CPS intakes between 10/1/2013-9/30/2018. Children less than 5 years of age with a CPS intake for physical abuse between 10/1/2013-3/30/2018 comprised the study cohort. Children with any CPS intake for child maltreatment prior to the intake which led to their recruitment were excluded as their family may have been previously provided with daycare services by CPS. Children with any time in foster care were also excluded to avoid the bias of including children who were removed from their

family's care and therefore never had the opportunity to receive CPS daycare services. States and territories with known problems with uniqueness of the child identifier variable (Montana, Iowa, Utah, and Puerto Rico) and states that offered daycare services to fewer than 10 families during the study period (California, Colorado, District of Columbia, Florida, Georgia, Idaho, Massachusetts, Michigan, Missouri, Mississippi, North Dakota, New Jersey, Nevada, Oregon, South Carolina, Virginia) were excluded. Study analyses were conducted using data from the remaining 23 states (Alaska, Alabama, Arkansas, Arizona, Connecticut, Kansas, Kentucky, Louisiana, Maryland, Maine, Minnesota, Nebraska, New Hampshire, New Mexico, Ohio, Oklahoma, Pennsylvania, Rhode Island, Tennessee, Texas, Washington, West Virginia, and Wyoming).

Exposure of Interest: Daycare services provision. Exposure to daycare services was measured as a time-dependent covariate with exposure starting at the time of the report date that led to daycare service being offered. This compromise was made given the date services began was missing from a substantial number of records. Daycare services are reported in NCANDS if they are provided after the date of CPS intake and within 90 days of a case determination. Once children were exposed to daycare services, they were considered exposed for the remainder of the study time period as service end date was not provided. Total person-time was defined as the duration in days from study entry time at first physical abuse intake until study end date or death (though no children meeting inclusion criteria were coded as maltreatment-related death in the study data set). Children with daycare exposure after the initial intake that led to recruitment were able to contribute time to both the exposed and unexposed daycare groups.

Outcome of Interest: Subsequent physical abuse intakes. Counts of CPS intakes for physical abuse during study follow-up served as the outcome of interest. All subsequent physical abuse intakes were captured for outcome measurement, regardless of intake report disposition. Report disposition is the CPS reported field indicating the severity of the final determination for the child abuse report. To avoid double counting of outcome events, CPS physical abuse reports occurring within 1 week of one another were considered the same event. Study outcomes were assessed from 1 week following the index report of physical abuse to the end of study follow-up (9/30/2018), or child death (though none were ultimately reported in the cohort).

Confounding variables. Confounders and precision adjustment variables for the model were chosen a priori, based on previous research as well as a directed acyclic graph created by the primary investigator. These included: child age category (less than 1, 1, 2, 3, 4, or 5 years), number of caregivers in home (<2, 2+), child lived in inadequate housing (defined as “substandard, overcrowded, unsafe or otherwise inadequate for the child to reside in, including homelessness”; y/n); family had financial problems (defined as “family's inability to provide sufficient financial resources to meet minimum needs”; y/n); family on public assistance (defined as any participation in “social service programs such as TANF, General Assistance, Medicaid, SSI, SNAP, WIC, etc.”; y/n); child had behavioral problems (defined as “behavior in the school and/or community that adversely affects socialization, learning, growth, and moral development”; y/n); child had an emotional disturbance issue (child had a clinically diagnosed emotional or behavioral issue; y/n); caregiver had an emotional disturbance issue (caregiver had a clinically diagnosed emotional or behavioral issue; y/n), and number of other services offered to the family (continuous).¹⁴ All covariates were measured as time-dependent.

Moderator of Interest. Notation by CPS that co-occurring domestic violence was present in the child's family (y/n) served as the study moderator of interest. In NCANDS, domestic violence is defined as: “Any abusive, violent, coercive, forceful, or threatening act or word inflicted by one member of a family or household on another. This risk factor can be applied to a caregiver but does not necessarily reflect domestic violence inflicted on the caregiver as it can represent domestic violence perpetrated on anyone in the household. In NCANDS, the caregiver could be the perpetrator or the victim of the domestic violence. This would not include violence against the child of concern in the physical abuse report.” The moderator was reported in NCANDS at each intake but was operationalized as a static variable for purposes of moderation analysis. Children from families with domestic violence noted by the CPS investigator at any intake during the study time period were considered positive for domestic violence.

Analysis

Power analyses were performed in preparation of study design to assess feasibility of the study. A minimal detectable risk ratio was estimated at 1.034-1.061 based on estimates of outcome prevalence (10-20%), exposure to daycare (5%), and sample size (n=450,000). Significant differences between study

groups in descriptive analyses were determined using chi square and two sample t-tests with unequal variance for categorical and continuous variables, respectively. Missingness of exposure and other covariates was addressed through use of multiple imputation by chained equations using Stata's *mice* procedure. Imputation models included the following variables: number of caregivers in home, inadequate housing, financial problems, public assistance, child behavioral problems, child emotional disturbance, caregiver emotional disturbance, whether child was daycare exposed, child sex, whether domestic violence was ever reported in child's home, child race/ethnicity, number of other services offered to family, intake count (outcome variable) and state. Inferential analyses were performed using the 20 multiply imputed datasets, Stata's *mi* module and multiple negative binomial regression. Negative binomial regression was chosen, in lieu of Poisson regression, to model count data given overdispersion of the outcome. All multiple regression models were adjusted for the following confounders and precision variables (chosen *a priori*): child age, number of caregivers in home, inadequate housing, financial problems, public assistance, child behavioral problems, child emotional disturbance, caregiver emotional disturbance, and number of other services offered. Analyses accounted for clustering by state and child identifier to make the necessary adjustments to the standard errors due to the nested and non-independent nature of observations. NCANDS data does not provide a family identifier, therefore clustering by family could not be accommodated. Analyses were conducted with use of Stata Statistical Software: Release 14 (2015. College Station, TX: StataCorp LP.).

Ethical Considerations

University of Washington and Seattle Children's Hospital Institutional Review Board designation of "Not Human Subjects" research was obtained before research was conducted. The NCANDS public use datasets were obtained from the National Data Archive on Child Abuse and Neglect (NDACAN) at Cornell University after an appropriate institutional license agreement was made. Appropriate approval was obtained for linking of datasets across multiple fiscal years.

Results

A comparison of demographic and social characteristics of children from families ever offered daycare services versus those from families never offered daycare services is presented in Table 1. NCANDS data had substantial missingness on variables describing social characteristics of client families

(Table 2). Table 1 represents children ever offered daycare versus never offered daycare, so does not exactly represent the final comparison groups (children can contribute person-time to both groups in the final model). Children whose families received daycare services were more likely to be from families that were reported to have the following risk factors: inadequate housing, financial problems, on public assistance, have a child with behavior problems or emotional disturbance, a caregiver with emotional disturbance and co-occurring domestic violence. Families receiving daycare services were more likely to be offered a greater number of CPS services relative to children from families who did not receive daycare services. Racial and ethnic distributions of children in families offered daycare services also differed from those families not offered daycare services, with families offered daycare services having a higher proportion of all non-White, non-Hispanic groups.

In the unadjusted model (Table 3), the domestic violence interaction term was not significant (p -value = 0.200), suggesting domestic violence does not modify the association of daycare services and future physical abuse intakes. There were 5,420.1 physical abuse intake events in the 66,881.69 person-years of daycare exposed follow-up time and 95,781.9 physical abuse intake events in the 1,307,357 person-years of unexposed follow-up time. These values were calculated using an average over the imputed data sets, due to missing in the exposed variable. In the final adjusted model (Table 3), the incidence rate of future child physical abuse intakes was significantly lower during daycare services-exposed periods relative to daycare unexposed periods (adjusted Incidence Rate Ratio: 0.725, 95% Confidence Interval 0.674, 0.779).

Discussion

This retrospective cohort study using national CPS administrative data found a protective effect of daycare service provision. Children whose families received CPS daycare services had rates of physical abuse intakes that were approximately 28% lower than children whose families did not receive daycare services. Results of the study provide further clarity to previous authors' work that has questioned the efficacy of CPS service provision. Palusci (2011) performed a retrospective cohort study of NCANDS data for FFY 2003-2007 for all types of child maltreatment and noted that in children under 5 years of age, only transportation (risk ratio: 0.73, 95% CI 0.59, 0.91) and family support services (hazard risk ratio: 0.88, 95% CI 0.79, 0.98) were associated with lower rates of recurrent child maltreatment.⁴ This study

expanded on a previous retrospective cohort study performed by the same author using NCANDS data for FFY 1995-1999 that found no association between post-investigation services receipt and subsequent substantiated or indicated physical abuse reports.³ In the Palusci (2011) study, daycare service provision effects were not specifically reported in the results, and the authors noted that overall, efficacy of service provision seems to have weak evidence.⁴ The positive association seen in our results may be related to our focus specifically on daycare services in relation to child physical abuse maltreatment type. Child maltreatment is heterogeneous, and it would not be anticipated that a single service would have similar impacts on recidivism of all maltreatment types (physical abuse, sexual abuse, neglect, emotional abuse, etc.). A retrospective cohort study of National Survey of Child and Adolescent Well-Being (NSCAW II) data by Kahn et al. (2010) only followed families to first re-report of any maltreatment, not only did not find a benefit for general in-home services (odds ratio (OR): 1.49, p-value 0.06), but found a marginally significant increased risk associated with service receipt.¹⁰ This analysis had more detailed case and social factor information than our study, as the NSCAW data provides direct investigator reports to supplement NCANDS data.

In contrast to these studies with mixed results in efficacy of services, Casanueva et al. (2015) determined in a retrospective cohort analysis of NCANDS and National Survey of Child and Adolescent Well-Being (NSCAW II) combined data that children receiving any investigation related services had significantly lower odds of re-reports (OR: 0.53, 95% CI 0.32, 0.88) and recurrence (OR: 0.49, 95% CI 0.26, 0.94) of child maltreatment. Again, in contrast to our study, service provision was only coded as yes/no, and the study combined all types of child maltreatment for re-report and recurrence data.⁷

Several previous studies have questioned whether services are preferentially provided to families with perceived higher risk of future maltreatment, which would potentially strongly confound the relationship between services and recurrence.^{4,9,15,16} Adjustment for the many socioeconomic and behavioral factors in our analysis was intended to prevent confounding by other social risk factors for child maltreatment. The specific factors chosen were selected *a priori* by the principal investigator based on previous research and not examined individually for confounding association in an exploratory analysis, but the significant association seen with adjusted data versus no significant association in unadjusted data suggests that some or all of the chosen variables confound the association seen.

However, given the absence of significance in the unadjusted model, our findings should be interpreted cautiously.

It is notable that domestic violence did not modify the protective association between daycare service provision and child physical abuse recidivism. Study authors initially discussed multiple hypotheses about how domestic violence might modify the association of daycare service provision and child physical abuse recidivism. It was theorized that daycare could be particularly protective in families with domestic violence in the home, if providing a daycare resource would give protective caregivers childcare relief and allow them to find employment or seek alternate housing, which would potentially allow a child to reside in a home without violence. However, it was also theorized abusive partners often use themes of power and control in the relationship, which could prevent service utilization and result in no significant effect seen. Though a particular interaction of daycare services and domestic violence was not seen, the overall beneficial association of daycare services supports its use in families with domestic violence.

Our study results are suggestive that provision of daycare services in children 5 years or younger helps reduce child physical abuse recidivism. Future studies could attempt to replicate these findings in other types of child maltreatment, as daycare services may be beneficial for families reported to have neglect, psychological/emotional maltreatment, or other types of maltreatment that are potentially exacerbated by caregivers not having steady, safe childcare resources. It would also be potentially beneficial to incorporate more rich data sources in future replicating studies, such as the NSCAW II as previously described, to provide further information about potential confounding factors. Ultimately, a prospective study of daycare services in at-risk families may be appropriate to validate the association seen. The U.S. Department of Health and Human Services (DHHS) Administration for Children and Families reported to Congress that in 2016 a median of 5.1% of child victims experienced a recurrence of child maltreatment within 6 months of a maltreatment report, which was increased from the previous two years.¹⁷ Further research and validation of CPS services, including daycare services, is *critical* to lowering this recurrence rate, as well as meeting the DHHS goal of keeping families together after maltreatment reports whenever it is safe to do so.

Limitations

Analysis was performed of this administrative data without specific knowledge of whether protocols for service provision exist in the included states. It is unclear how it is determined what services, if any, are offered to families. If there exists an underlying protocol for specific family or case characteristics to trigger service provision, future studies should limit the control or comparison group to families with similar characteristics. It was also not known in this analysis how daycare services are offered (via mail, phone, in-person etc.), what type of daycare service provision is provided (voucher system, specific daycare service selection, reimbursement, etc.), and how long daycare services continued for families. Future studies including this information would improve understanding of the protective effect seen.

Confounding and precision variables were coded as dichotomous variables. Coding these variables as dichotomous variables may result in residual confounding. The variables also sometimes lacked specificity per the NCANDS coding definitions (i.e. domestic violence was coded for any violence in the home, even if it didn't involve the child's caregivers). In many cases, it was not known if the family self-reported demographic and social measure variables or if they were chosen based on CPS investigator discretion. This limits interpretation of their use in adjusting the association seen.

Conclusion

Provision of daycare services appeared to be significantly associated with decreased rates of future child physical abuse intakes. Domestic violence did not appear to modify this association. Further research is needed, as appropriate service provision is likely critical for prevention of child maltreatment.

Figures and Tables:

Table 1. Demographics and Sample Characteristics for Unique Children, as of First Physical Abuse Report

	Ever Exposed to Daycare (n = 21,093)			Never Exposed to Daycare (n = 378,876)			p-value ^a
	n	%	% ^b	n	%	% ^b	
Male	11,583	54.91	54.85	205,130	54.14	54.36	0.088
Race							
White, non-Hispanic	7,476	35.44	38.68	177,877	46.95	53.40	<0.001
Black, non-Hispanic	4,075	19.32	22.40	7	17.22	20.99	
White/Black, non-Hispanic	867	4.11	4.73	65,236	4.11	4.65	
White, Hispanic	5,979	28.35	26.61	15,564	16.20	15.94	
Other race and ethnicity	1,462	6.93	7.58	61,391	4.41	5.03	
Inadequate Housing	974	4.62	8.00	5,534	1.46	3.47	<0.001
Financial Problems	2,825	13.39	19.65	12,608	3.33	6.45	<0.001
Public Assistance	4,428	20.99	34.68	27,475	7.25	14.55	<0.001
Behavioral Problems Child	529	2.51	3.48	3,668	0.97	2.05	<0.001
Emotional Disturbance							
Caregiver	1,391	6.59	18.70	12,953	3.42	11.94	<0.001
Child	54	0.26	1.80	709	0.19	0.70	0.039
2+ Caregivers in Home	5,295	25.10	62.02	107,966	28.5	63.25	0.728
Domestic Violence ^c	4,564	21.64	34.88	42,644	11.26	20.59	<0.001
Initial Report S/I/AR-V ^d	4,451	21.10	N/A	48,452	12.81	N/A	<0.001
	Median	IQR ^e		Median	IQR		
Other Services Offered	2	1,3		0	0,0		<0.001
Age	2	0,4		2	1,4		<0.001

a. p-value was calculated from unimputed data with use of chi-squared analysis for categorical data and t-test with unequal variance for continuous data.

b. Represents statistics with imputed data. Other table data is from unimputed data.

c. Domestic violence is documented as present for a child if ever reported in the study time period

d. Substantiated, Indicated, or Alternate-Response Victim report disposition. There was no missingness for this variable, so no imputed value is provided.

e. Interquartile range

Table 2: Missingness^a

	Intakes with Daycare Exposure (n = 25,423)	Intakes without Daycare Exposure (n = 452,074)	All Intakes (n = 600,401)
Child sex, n (%)	95 (0.37)	2,722 (0.60)	3,386 (0.56)
Race, n (%)	1,350 (5.31)	46,428 (10.27)	59,739 (9.95)
Inadequate Housing, n (%)	11,092 (43.63)	258,435 (57.17)	335,303 (55.85)
Financial Problems, n (%)	3,763 (14.80)	101,773 (22.51)	162,254 (27.02)
Public Assistance, n (%)	8,389 (33.00)	218,064 (48.24)	313,866 (52.28)
Child Behavioral Problems, n (%)	4,603 (18.11)	180,966 (40.03)	259,334 (43.19)
Caregiver Emotional Disturbance, n (%)	9,406 (37.00)	233,083 (51.56)	307,110 (51.15)
Child Emotional Disturbance, n (%)	9,854 (38.76)	179,098 (39.62)	275,282 (45.85)
Household with 2+ caregivers, n (%)	15,001 (59.01)	248,071 (54.87)	306,824 (51.10)
Domestic Violence, n (%)	8,882 (34.94)	179,027 (39.60)	222,253 (37.02)
Number of Other Services Offered, n (%)	23,009 (90.50)	349,132 (77.23)	495,045 (82.45)
Report Disposition, n (%)	0 (0)	0 (0)	0 (0)
Age, n (%)	0 (0)	0 (0)	0 (0)

a. Derived from non-imputed data. The variable for exposure also has missingness for 122,904 intakes (20.47%)

Table 3. Incidence rate ratio for future physical abuse CPS intake, for children with daycare service provision exposure versus without daycare service provision exposure

	Unadjusted IRR ^a , 95% CI ^b	Adjusted ^c IRR, 95% CI
Overall (# unique children = 499,199)	1.091 (1.033, 1.151)	0.725 (0.674, 0.779)

a. Incidence Rate Ratio

b. Confidence Interval

c. Adjusted for child age, number of caregivers in home, inadequate housing, financial problems, public assistance, child behavioral problems, child emotional disturbance, caregiver emotional disturbance, and number of other services offered.

References

1. Kempe CH. Child Abuse- The pediatrician's role in child advocacy and preventative pediatrics. *Am J Dis Child*. 1978; 132: 255-260.
2. Holzer PJ, Higgins JR, Bromfield LM, Higgins DJ. The effectiveness of parent education and home visiting child maltreatment prevention programs. *Child Abuse Prevention Issues*. 2006; 24.
3. Palusci VJ, Smith EG, Paneth N. Predicting and responding to physical abuse in young children using NCANDS. *Child Youth Serv Rev*. 2005; 27 (6), 667-682.
<https://doi.org/10.1016/j.childyouth.2004.12.004>
4. Palusci VJ. Risk factors and services for child maltreatment among infants and young children. *Child Youth Serv Rev*. 2011; 33(8), 1374-1382.
<https://doi.org/10.1016/j.childyouth.2011.04.025>
5. Littell JH, Schuerman JR. What works best for whom? A closer look at intensive family preservation services. *Child Youth Serv Rev*. 2002; 24: 673-699.
6. Solomon D, Åsberg K, Peer S, Prince G. Cumulative risk hypothesis: Predicting and preventing child maltreatment recidivism. *Child Abuse Negl*. 2016 Aug; 58: 80-90. doi: 10.1016/j.chiabu.2016.06.012.
7. Casanueva C, Tueller S, Dolan M, et al. Examining predictors of re-reports and recurrence of child maltreatment using two national data sources. *Child Youth Serv Rev*. 2015; 48, 1-13.
8. Fluke JD, Shusterman GR, Hollinshead D, Yuan YT. Rereporting and Recurrence of Child Maltreatment: Findings from NCANDS. Office of the Assistant Secretary for Planning and Evaluation. <https://aspe.hhs.gov/report/rereporting-and-recurrence-child-maltreatment-findings-ncands>. Published 7/30/2005. Accessed 6/23/2021.
9. Jonson-Reid M, Emery CR, Drake B, Stahl Schmidt MJ. Understanding Chronically Reported Families. *Child Maltreat*. 2010; 15(4), 271-281.
10. Kahn JM, Schwalbe C. The timing to and risk factors associated with child welfare system recidivism at two decision-making points. *Child Youth Serv Rev*. 2010; 32, 1035-1044.
11. Solomon D, Asberg K. Effectiveness of child protective services interventions as indicated by rates of recidivism. *Child Youth Serv Rev*. 2012; 34, 2311-2318.
12. Casanueva C, Martin SL, Runyan DK. Repeat reports for child maltreatment among intimate partner violence victims: Findings from the National Survey of Child and Adolescent Well-being. *Child Abuse Negl*. 2009; 33, 84-93. <https://doi.org/10.1016/j.chiabu.2007.04.017>
13. Riggs JL, Janisse H, Huth-Bocks A. Parenting mediates associations between intimate partner violence at different life stages and toddler social-emotional problems. *Child Maltreat*. 2021; Digital print before publication. <https://doi.org/10.1177/10775595211002638>
14. National Child Abuse and Neglect Data System (NCANDS) Child File FFY 2018: User's Guide. National Data Archive on Child Abuse and Neglect (NDACAN). https://www.ndacan.acf.hhs.gov/datasets/pdfs_user_guides/dataset233usersguide.pdf. Published 01/2020. Accessed 6/23/2021.
15. Bae H, Solomon P, Gelles R, White T. Effect of Child Protective Services System Factors on Child Maltreatment Rereporting. *Child Welfare*. 2010; 89 (3): 33-55.
16. Simon JD, Brooks D. Identifying families with complex needs after an initial child abuse investigation: A comparison of demographics and needs related to domestic violence, mental health, and substance use. *Child Abuse Negl*. 2017; 67: 294-304.
17. Child Welfare Outcomes 2016: Report to Congress. Children's Bureau of the Department of Health and Human Services. <https://www.acf.hhs.gov/sites/default/files/documents/cb/cwo2016.pdf>. Published 9/9/2019. Accessed 6/23/2021.