Child Abuse and Neglect

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Abstract

Child maltreatment is a prevalent and costly problem. Millions of children worldwide experience some form of parental maltreatment, and it has lasting consequences, costing society trillions of dollars. This chapter examines child maltreatment through an economic lens, building on theoretical approaches for conceptualizing how different types of maltreatment occur. In addition, the chapter describes available data sources, spotlighting the National Data Archive on Child Abuse and Neglect in the United States. Finally, the chapter reviews the incidence of child maltreatment and evidence on risk factors, consequences, and promising interventions. Risk factors can be categorized into six groups: parent or caregiver factors, child factors, family factors, community or environmental

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factors, factors for recurrence, and co-occurring factors. Parent or caregiver factors and family factors seem to be the strongest predictors of child maltreatment. Economists should care about child maltreatment because the consequences, such as poor health and delinquency, contribute to inequality and reduce the efficiency and effectiveness of other social investments. In general, more evidence is needed to better understand the causal mechanisms of the different types of maltreatment and to implement more effective policies.

Introduction

Child maltreatment is pernicious and pervasive. In the United States, 4.4 million allegations of child abuse or neglect involving 7.9 million children were reported to authorities in fiscal year 2019, and 656,000 children were determined to be maltreated (U.S. Children's Bureau 2021). The United States is not an outlier; across several high-income countries, Gilbert et al. (2009) estimate that 4 to 16 percent of children are physically abused each year and about 10 percent are neglected or emotionally abused. Child maltreatment is immediately harmful and damaging. It can also have lasting consequences, including effects on physical and mental health, delinquency and criminality, drug and alcohol abuse, risky behaviors, and the intergenerational perpetration of maltreatment (Gilbert et al. 2009; National Research Council 2014). Peterson et al. (2018) estimate that the annual economic burden from child maltreatment in the United States is $2 trillion. In Australia and Canada, the economic burden is approximated at $27 billion (McCarthy et al. 2016) and $15.7 billion (Bowlus et al. 2003), respectively. Finally, in the United Kingdom, Conti et al. (2021) estimate the economic burden per victim to be £89,390 (or $112,000).

Developmental psychologists, family researchers, sociologists, and medical researchers have studied child maltreatment extensively around the world. Increasingly, economists are contributing to our understanding. The economic analysis of maltreatment poses many challenges. Economists have struggled to incorporate maltreatment – the infliction of a bad – into their standard rational-choice models of household behavior, which generally posit the maximization of well-being and altruistic, rather than malevolent, preferences. As with other social scientists, economists must contend with incomplete and selectively reported data on maltreatment. They also face difficulties – but bring tools and insights – in developing causal evidence regarding the determinants and consequences of maltreatment.

This chapter examines child maltreatment in high-income countries through an economic lens. It focuses on high-income countries because definitions, data availability, and social services differ in developing countries. The chapter considers different types of maltreatment, as these likely have different causes and consequences. It reviews data sources that have been used for research and summarizes information about the incidence of maltreatment. It discusses alternative theoretical approaches for conceptualizing how maltreatment occurs, giving special attention to

gaps in economists' frameworks. It also reviews evidence on the causes, consequences, and possible preventive measures for maltreatment.

What Is Child Maltreatment?

Child maltreatment is a broad term that is used to describe several forms of behavior that actually or potentially harm children. The World Health Organization (WHO 2020) lays out an encompassing definition for child maltreatment that other countries use or adapt. Table 1 lists the WHO definition and alternative countries' definitions.

Within the United States, each state's child welfare and legal systems have definitions for investigating child maltreatment, protecting children, and prosecuting

Table 1 Definitions for child maltreatment

Place/organization	Definition	Source
World Health Organization	All types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence, and commercial or other exploitation, which results in actual or potential harm to the child's health, survival, development, or dignity in the context of a relationship of responsibility, trust, or power	World Health Organization (2020)
Australia	Uses same definition as the WHO	Australian Institute of Family Studies (2018)
Canada	Acts of commission or omission by a parent or other caregiver that result in harm, potential for harm, or threat of harm to a child. The five primary forms of maltreatment are physical abuse, sexual abuse, physical neglect, emotional maltreatment, and exposure to domestic violence	Canadian child welfare research portal
Europe	Uses same definition as the WHO	Sethi et al. (2018)
United States Child abuse prevention and treatment act (CAPTA), (P.L. 100–294)	Any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation. . .or an act or failure to act, which presents an imminent risk of serious harm	U.S. Children's Bureau (2021)
United Kingdom	Intentional harm by an adult or another child – It can be over a period of time but can also be a one-off action. It can be physical, sexual, or emotional, and it can happen in person or online. It can also be a lack of love, care, and attention – This is neglect	National Society for the Prevention of Cruelty to Children (2022)

perpetrators. Similarly, in Canada, each province defines and investigates child maltreatment differently (Public Health Agency of Canada 2010). In Australia, there are two legal systems set up to respond to and prevent child maltreatment: the civil legal system, which focuses on the future possibility of maltreatment, and the criminal legal system, which determines the guilt of a past offense (Australian Institute of Family Studies 2018).

As the definitions indicate, maltreatment incorporates several distinct elements of abuse and neglect. Physical abuse refers to a non-accidental physical injuring of a child. Within the United States, some states extend the definition to include threats to cause physical injury. Sexual abuse refers to sexual conduct with a child, the simulation of sexual conduct for pornography, or sexual exploitation of a child, including sex trafficking. Emotional abuse refers to the non-accidental infliction of emotional or psychological injury. Neglect refers to a failure to provide age-appropriate care, goods, or supervision to a child. Neglect can be further decomposed into neglect of children's physical needs, emotional needs, schooling needs, and other needs. Roughly speaking, abusive behaviors tend to be acts of commission, while neglectful behaviors tend to be acts of omission. However, there are exceptions. For example, an extreme form of neglect – abandonment – is an act of commission.

Economists are not always careful in their descriptions of maltreatment, sometimes using the terms maltreatment and abuse interchangeably or not distinguishing among different types of abuse. Although all types of maltreatment are harmful, they have different causes and arise in different situations. An analysis or model for one type of maltreatment may not be appropriate for another.

Differences across geographic areas and changes within places over time in their legal definitions of abuse and neglect greatly complicate research, especially research based on administrative reports. For example, the Child Welfare Information Gateway's (2019) catalog of state laws in the United States indicates that eight states exclude threats of physical harm from their definitions of reportable abuse and two states exclude emotional abuse. In Canada, the age of coverage ranges from 16 to 18 across provinces (Public Health Agency of Canada 2010). These differences reduce the comparability of data in cross-area research.

Data

The National Data Archive on Child Abuse and Neglect (NDACAN), supported by the US Children's Bureau, houses administrative, and survey child maltreatment data for the United States. The data are the source of annual official reports in the United States, including the annual *Child Maltreatment* report (e.g., U.S. Children's Bureau 2021). The data can also be used to examine trends, risk factors, and the impact of policy on child maltreatment. The administrative data include report-level details on maltreatment, when and by whom the report was made, who was involved, and the disposition. The survey data available through NDACAN follow up with children, youth, and families who have been involved with the child welfare system. This

section describes these and other data, describes their benefits and limitations, and provides examples of uses.

A key NDACAN data resource is the National Child Abuse and Neglect Data System (NCANDS), which has been used in more than 200 studies. NCANDS is a federally sponsored, national data collection system that contains details about every child-level report of maltreatment submitted to a state agency in the United States. States are not required to participate, but as of 2002, the majority have contributed data as their participation is tied to federal funding. Since 2012, all 50 states plus the District of Columbia and Puerto Rico have been submitting data to NCANDS, meaning that NCANDS currently provides the universe of reported cases across states. NCANDS consists of two files: a state-level "agency" file that contains aggregate data on maltreatment reports that are made and services that are provided within a state and a report-level "child" file that contains information on each individual maltreatment report that was screened in by the state agency for either investigation or to receive a service. The agency file includes the total annual numbers of maltreatment reports, reports that are screened out, types of reports, agency staff, children and families receiving services, and other characteristics. The child file, which is available to researchers on a restricted basis, provides report-level details about the alleged maltreatment, including location, date, type of maltreatment, reporting personnel, perpetrator's relationship, disposition, victims, and follow-up services. The child file also has measures that can be used as covariates and controls, including demographic information, household characteristics, and risk factors, such as alcohol and drug abuse, domestic violence, financial problems, inadequate housing, public assistance, and caregiver disability. In addition, the structure of the data allows children to be linked longitudinally, so researchers can examine multiple incidences and the reoccurrence of maltreatment.

NCANDS provides many advantages to researchers examining predictors of child maltreatment, the impact of policy on child maltreatment, and the reporting-to-substantiation process, and the data can be used in many ways. For example, Paxson and Waldfogel (2002) used the National Center on Child Abuse and Neglect data, NCANDS's predecessor, to investigate the impact of work and welfare on child maltreatment. More recently, Bullinger et al. (2021a, b) used the data to investigate the connection between income mobility and child maltreatment; Prettyman (2021) examined how changes in the list of mandatory reporters impact child maltreatment reporting, and Raissian and Bullinger (2017) analyzed the impact of minimum wage levels on child maltreatment.

One drawback of the NCANDS data is that there is tremendous heterogeneity in outcomes across states and over time, owing to different definitions of maltreatment, reporting tools and procedures (e.g., the introduction of telephone hotlines and web reporting), screening rules, and substantiation processes. For example, the proportion of maltreatment cases that were substantiated in Georgia plummeted 63 percent from 2015 to 2019, while the proportion in Montana doubled over these years (U.S. Children's Bureau 2021). These enormous shifts were mainly due to procedural changes, rather than the underlying rates of maltreatment. Procedural heterogeneity makes it difficult to understand the trends in the true level of maltreatment

across states and over time resulting from national-level shocks, such as a recession, and other policy responses.

Other drawbacks of the NCANDS data are that they have limited sets of controls, have few measures of subsequent child or family well-being outcomes, and lack identifiers that would allow them to be linked to other administrative data. As a result, there is no information about subsequent outcomes for involved children and youth, like their education or health, so these data are not a good source for examining the developmental consequences of maltreatment. Put another way, the data limit the ability of researchers to examine maltreatment as an explanatory variable.

States can fill this void by linking their own administrative data from different departments and sources, and Putnam-Hornstein et al. (2013) have described several promising opportunities. For example, in Michigan, Ryan et al. (2018) linked individual-level child maltreatment and education data to investigate the impact of maltreatment on cognitive achievement, and in California, Putnam-Hornstein et al. (2015) linked birth and Child Protective Services (CPS) records to investigate the prevalence of intergenerational maltreatment among teen mothers. Another advantage of state data is that they can be examined at smaller geographic levels than NCANDS data, which omit detailed geographies below the county level for confidentiality reasons. Many states, including California, Colorado, Georgia, Florida, Illinois, Indiana, Michigan, and New York, have made their administrative data available to researchers; however, confidentiality and data sharing laws can limit access and use.

In several other developed countries, population-based administrative data are integrated with longitudinal child protection data to overcome shortcomings of administrative data. Chikwava et al. (2021) summarize the pros and cons of this approach and recent studies. In Australia, Doidge et al. (2017) take this data approach to identify economic predictors of child maltreatment. In the United Kingdom, one such survey used among child maltreatment scholars is the Avon Longitudinal Study of Parents and Children (e.g., Sidebotham and Heron 2006). This survey contains data on more than 14,000 children, obtained from obstetric records and a series of parental questionnaires administered during pregnancy and until the child was 3 years old. CLOSER provides additional longitudinal population studies within the United Kingdom (CLOSER 2018).

Another data resource at the NDACAN, the National Incidence Study (NIS), can be used to overcome the selectivity and reporting idiosyncrasies of the NCANDS. The NIS is a congressionally mandated collaboration between child welfare agencies, hospitals, schools, and police departments across the country that includes reports from all these sources and more accurately captures the total incidence of child maltreatment. However, these data are only collected every 5 to 10 years. Canada has a similar data source, the Canadian Incidence Study (Esposito et al. 2020). Physician and other non-agency reports widen the scope of reporting, but as Hoedeman et al. (2021) uncovered in a survey of European emergency departments, these sources can have inconsistencies.

Survey data provide a way to study child maltreatment with richer sets of controls and outcomes. The NDACAN houses two surveys – the Longitudinal Studies on Child Abuse and Neglect and the National Survey of Child and Adolescent Well-Being – that use children who were involved with child welfare agencies as their sampling frames. Several other general-purpose household surveys ask information about child maltreatment or related behaviors. For example, the Fragile Families and Child Wellbeing Survey (Fragile Families) was designed to investigate how child-bearing influences family formation, especially among unmarried and low-income parents, and the Child Development Supplements of the Panel Study of Income Dynamics were designed to study human and social capital formation in a general sample of children. Outside of the United States, Hillis et al. (2016) catalog population-based surveys that measure violence against children. Over 50 countries have surveys that provide estimates of exposure to violence, and eight countries have surveys that address recent experiences with violence. However, there are still notable gaps. In the European Union, less than half of the countries have conducted child maltreatment population surveys (Sethi et al. 2018).

General-purpose surveys are not subject to the same selection issues of administrative or administratively derived data processing. Importantly, they therefore can be used to investigate the individual risks of being maltreated. However, survey information on maltreatment might be subject to misreporting, social desirability bias, and recall bias because they rely on parents self-reporting on their behaviors and disciplinary actions. In addition to legal and social incentives to misreport, respondents may simply misremember incidences or misinterpret meanings of abuse and neglect. Moreover, infants and young children are not capable of self-reporting. This is problematic because they appear to be at the highest risk of maltreatment (U.S. Children's Bureau 2021).

Another advantage of survey data is that they include questions beyond the incidence of child maltreatment, about family structure, relationships, and other outcomes. For example, Misheva et al. (2017) used the Australian Twin Register, a survey of 4200 twin pairs that asks about family background, socioeconomic status, health behavior, and feelings to estimate how physical and sexual abuse impact criminal behavior. Comparing incidences of child maltreatment within twin pairs allows researchers to eliminate unobserved family characteristics that might be correlated with both child maltreatment and outcomes later in life.

Survey data also provide other covariates to examine causes and consequences of maltreatment. For example, Hamby et al. (2010) and Finkelhor et al. (2019) used the National Survey of Children's Exposure to Violence (NatSCEV) to investigate the association between intimate partner violence and child maltreatment, and Fletcher and Schurer (2017) used the National Longitudinal Study of Adolescent to Adult Health (Add Health) to examine how adverse child experiences (including maltreatment) influence adulthood personality.

Such rich data can come at the cost of sample size, incomplete questions, and time lags. Often sample sizes in surveys are modest, ranging from 1300 to 5800 children. Add Health is one of the largest surveys, with a sample size of 15,701 children surveyed in the waves that included questions about care and maltreatment by adults.

In addition, few surveys have a complete set of questions that cover all dimensions of maltreatment or that directly cover maltreatment. Usually they just provide a few measures, often proxies for maltreatment, such as spanking. For example, Brooks-Gunn et al. (2013) used Fragile Families and showed that hardships brought on by the Great Recession were associated with increased spanking. Finally, to observe adult outcomes but also have prospective measures of maltreatment, the surveys must have been started at least 20 to 30 years earlier. A concern with using these types of data is that the context, systems, and supports for child maltreatment may have changed markedly over that time; as a result, the consequences may be different for recent cohorts of children.

Incidence of Child Maltreatment

Over seven million children are referred to CPS each year in the United States, and the number of referrals has been increasing over time (U.S. Children's Bureau 2021). The referral rates range from 17.1 referrals per 1000 children in Hawaii to 171.6 in Vermont. There is considerable heterogeneity in the referral rate across states, with no clear pattern. Of the children referred to CPS, just under half (44 percent) are involved in a report that gets investigated. The proportion of referrals that are screened out also varies considerably across states. For example, South Dakota screens out as many as 84 percent of their referrals, and Alabama screens out as few as two percent. The change in the victimization rate from 2015 to 2019 ranges from a decrease of 65 percent to an increase of 100 percent across states. Like the referral rate, there is no clear pattern; neighboring states and states of similar political affiliations have different trends.

Nationally, over 650,000 children are found to be victims of child maltreatment in the United States; 380,000 receive post-response services, and 142,000 receive foster care services. Child maltreatment victimization has steadily declined over the last three decades, from 12 victims per 1000 children in 1990 to 9 per 1000 children in 2019 (Finkelhor et al. 2018; U.S. Children's Bureau 2021). This decline is driven by declines in physical and sexual abuse, while neglect rates have persisted (Finkelhor et al. 2018). Bullinger et al. (2020) attribute this pattern to a lack of understanding the causal mechanisms of neglect. Despite considerable declines in abuse victimization, more than 1500 children die from abuse and neglect.

Child maltreatment is also a persistent problem worldwide. Sethi et al. (2018) estimate that child maltreatment affects over 55 million children in the European Union, resulting in more than 700 preventable deaths. While Sethi et al. report improvements over the past 5 years for Europe as a whole, Gilbert et al. (2012) document the lack of progress in reducing child maltreatment in Sweden and England as well as in other areas, including Western Australia, New Zealand, Manitoba, and United States.

Conceptualizing Child Maltreatment

To conceptualize why child maltreatment occurs and under what circumstances, we first need to identify who is involved. Maltreatment necessarily involves one or more perpetrators and one or more victims. Conceptualizations would explain why perpetrators would act in this way, making characteristics of perpetrators relevant. Characteristics of the victim would also be relevant, as some children, such as infants, might be more vulnerable than others. We further need to consider the relationship between the perpetrator and child. For maltreatment from caregivers, the perpetrator and victim would live together within a family or household which is situated within a community, institutional, economic, and social context. Thus, the conceptualization should include characteristics about the relationship, family or household, and contexts.

Belsky (1980) developed an integrated conceptualization that incorporated all these elements. His model combined elements of developmental theories of the caregiver with ecological theories (e.g., Garbarino 1977) that considered the interactions with the child, the family/household system, and the external environment at the community and broader levels. Human development models have further considered how the external environment acts through personal and family characteristics, such as parental inexperience, parental conflict, and child difficulties (e.g., Baumrind 1994), and how family stresses work through these processes (e.g., Warren and Font 2015). Models from developmental and family researchers tend to be comprehensive but stated without formal mathematics.

In contrast, economists have developed formal models of child maltreatment based on rational-choice principles. Their models have followed two general approaches. The first approach has focused on abuse (usually physical abuse) and modeled that abuse as an instrumental good—that is, as something that has direct or indirect value to the perpetrator. Markowitz and Grossman (1998) proposed a framework based on crime models in which caregivers have direct preferences over committing violence and those preferences may be affected by alcohol consumption. Their framework does not explain why caregivers hold these preferences or carefully consider the behavior or reactions of the child. Akabayashi (2006) and Weinberg (2001) have addressed these shortcomings through principal-agent models in which parents value their children's development and behavior and use corporal punishment as a disciplinary device, with child abuse being an extreme form of punishment. In these models, parents abuse children because they have unrealistically high expectations for them or lack the resources to provide monetary or other incentives to encourage wanted behaviors.

The second economic approach has been to analyze maltreatment through standard household production models of child "quality." For example, Seiglie (2004) examined maltreatment through a child quality-quantity framework. In these models, child maltreatment results from low levels of household investment or is viewed as a low-quality outcome. This framing is consistent with some forms of neglect but not with abuse.

Neither economic approach addresses maltreatment as bad or incorrect parenting. Cobb-Clark et al. (2019) have recently developed a model that may be helpful. They extend the household production framework to incorporate goods, parental time, and parenting approaches, such as parental warmth and consistency, into production of child quality. They conjecture that parenting approaches require inputs of effort that are distinct from other time inputs and that low levels of resources or family stresses can interfere with parents' ability to contribute that effort.

Another shortcoming of the economic models is that they consider maltreatment as instrumental and rational rather than as something that is expressive or that results from a loss of control. Card and Dahl (2011) found strong evidence for expressive family violence by studying the rates at which men physically abused their partners following unexpected losses by local professional football teams. They hypothesized that these unexpected losses could add to stress and create uncontrolled bursts of anger that resulted in violence. Their findings align with elements of the family stress approach.

Risk Factors

Research has uncovered scores of characteristics that are associated with higher risks of children being maltreated. The Child Welfare Information Gateway (2022) categorizes the risk factors into six groups: parent or caregiver factors, child factors, family factors, community or environmental factors, factors for recurrence, and co-occurring factors. The European Status Report simplifies risk factors into four categories: relationship, individual, societal, and community (Sethi et al. 2018). Unfortunately, the evidence regarding risk factors comes from many studies which vary not only in their findings but also in their populations and samples, the types of maltreatment they examine, the risk factors they include as explanatory variables, and other methodological elements. To evaluate these findings systematically, Stith et al. (2009) conducted a meta-analysis of 155 comparison-group studies of child physical abuse and neglect that included 39 potential risk factors. They uncovered statistically distinguishable associations for nearly all the risk factors. When they considered the sizes of the associations, they found that parental anger or high reactivity, family conflict, and problems with family cohesion were especially strong risk factors for physical abuse and that poor parent–child relationships, parents who perceive their child as a problem, parental stress, parental anger or high reactivity, and parental self-esteem were especially strong risk factors for child neglect. Economic factors, such as parental unemployment and low socioeconomic status, were moderately associated with physical abuse and neglect.

The National Research Council (2014) reviewed studies and more carefully considered the *quality* of the evidence regarding risk factors. They assessed that the evidence was strongest for three characteristics of parents: parental substance abuse, a history of being abused, and depression. They also assessed that evidence regarding the roles of family stresses and poverty was moderately strong. In a review focusing on economic determinants, Berger and Waldfogel (2011) similarly found

that low levels of resources raised the risks of maltreatment and especially of child neglect. Their review pointed to evidence from observational studies but also to several social experiments that exogenously altered families' levels of public assistance and led to changes in maltreatment. Bullinger et al. (2021a, b) have additionally discussed quasi-experimental evidence on income effects from US studies that examined changes to the Earned Income Tax Credit and minimum wage regulations.

Baumrind (1994) reviewed evidence regarding the mechanisms of how economic circumstances and other aspects of families' social contexts can result in maltreatment. She described how low levels of resources increased stresses for families and increased household conflicts. Parents in these situations tended to rely on more harsh and less consistent parenting. Low resources were also associated with negative parental affect and negative attributions by parents regarding their children's behavior. In her analysis, family conflict, harsh and inconsistent parenting, parental affect, and parental attributions were proximate causes, and resources and the social context were more distal causes.

The evidence regarding causes of child maltreatment comes from observational data, and nearly all of it is developed through non-experimental designs. There are many potential risk factors for child maltreatment, and the relevant factors frequently co-occur. Datasets – particularly administrative sources – often lack direct measures of these factors. This leads researchers to substitute indirect proxy measures for the factors that are actually of interest, such as substituting local economic conditions for a household's economic status. Even with adequate measures, the co-occurrence of factors makes it difficult to isolate one from the others. Additionally, many of the factors are endogenous. Thus, much more research is needed to establish causes. Social experiments involving public assistance and social service programs provide one tool for developing rigorous evidence, and natural experiments involving exogenous changes in policies provide another.

Consequences

Similar methodological challenges affect efforts to determine the consequences of child maltreatment. Maltreatment is a behavioral outcome and tends to co-occur with many other conditions that have consequences for children's development. This complicates the analysis of maltreatment as a cause of other outcomes. Consequences in several domains may also appear long after maltreatment occurs, necessitating that longitudinal data be collected or developed.

Immediate and indisputable consequences of maltreatment include the physical injuries suffered by children, including fatal injuries. In fiscal year 2019, the US Children's Bureau (2021) estimated that 1840 American children died from abuse or neglect, or about 2.5 for every 100,000 children. Infants were at especially high risk with a fatality rate that was 10 times higher than other children. Among the children with non-fatal injuries, Peterson et al. (2018) reported that the average short-term medical cost in the United States was just over $35,000 per victim.

Gilbert et al. (2009) evaluated research on other consequences of child maltreatment. Focusing on the studies in which maltreatment was reported or recorded prospectively, they concluded there is strong evidence that maltreatment increases posttraumatic stress disorder (PTSD), behavioral problems in childhood and adolescence, obesity, and criminal behavior. They also concluded that there is moderate evidence that child maltreatment lowers educational achievement and employment opportunities and increases depression, suicide attempts, and sex work. The National Research Council (2014) also concluded that there are consequences for physical health, psychological well-being, neurological development, relationship skills, and risky behaviors. They further found that the consequences are worse the longer children are maltreated.

Beyond the direct implications for children's well-being, Berger and Waldfogel (2011) have raised two additional economic arguments regarding why policymakers should address child maltreatment. The first argument is that maltreatment contributes to inequality. Maltreatment and its consequences are experienced by some children but not others, leading to an unequal distribution of the burden of maltreatment. Moreover, the higher incidence of maltreatment among children in households experiencing disadvantage coupled with the educational and occupational consequences of maltreatment likely contributes to intergenerational inequality. The second argument is that maltreatment reduces the efficiency and effectiveness of other social investments. Society invests substantial amounts in children's education and health care – investments that may be undermined or negated by maltreatment.

Policies and Interventions

Economists around the world have become increasingly interested in the role mandatory reporters play detecting child maltreatment (see, e.g., Fitzpatrick et al. 2020, Cabrera-Hernandez and Padilla-Romo 2020). This interest grew with the drastic decline in reporting during school closures and stay-at-home orders at the start of the COVID-19 pandemic and will undoubtedly persist with the release of the NCANDS 2020 data. Baron et al. (2020) and Prettyman (2021) used real-time data from Florida and Colorado, respectively, to predict the number of unreported allegations because of school closures, using counterfactual rates generated by previous years.

Mandatory reporting legislation, such as universal reporting laws, training requirements, and lists of mandatory reporters, are relatively easy to implement and modify. However, there is limited conclusive research and thus no consensus as to which policies are most effective. On the one hand, Mathews and Kenny (2008) found that mandatory reporting legislation increased the detection of child maltreatment in Australia, Canada, and the United States; Mathews et al. (2016) found that mandatory reporting improved detection of sexual abuse in Australia, and Tonmyr et al. (2018) found that it increased contact with CPS for frequent and severe child maltreatment in Canada. On the other hand, when Prettyman (2021) investigated how changes in the *list* of mandatory reporters within a state over time impacted

child maltreatment detection in the United States, she only found modest impacts. It is important to understand how maltreatment is detected, as detection opens the door to other services and supports. However, the ultimate goal is to improve child well-being, which requires prevention, and effective services should maltreatment occur.

A number of interventions have been developed to reduce the incidence of child maltreatment and to improve outcomes for children and in families where maltreatment has occurred. Many of these interventions have been subjected to rigorous experimental analyses, and several appear to be effective. The United States also codified the use of rigorous evidence into federal policy through the Family First Preservation Services Act (FFPSA) in 2018. The FFPSA is reforming the child welfare system in the United States by directing services towards keeping maltreated children with their families in situations where this is safe and appropriate, rather than being placed out-of-home. The FFPSA further requires that services it funds be shown to be effective, either through existing research evidence or through states conducting rigorous studies of their services. It mandated the creation of a repository, the Title IV-E Prevention Services Clearinghouse, that catalogs the research evidence for different interventions and assesses how well the evidence supports their effectiveness (Abt Associates 2022).

Several skill-based home-visiting interventions for new and expecting parents have well-supported evidence for preventing child maltreatment. The Nurse-Family Partnership involves regular visits by trained nurses, who help with health practices, parenting skills, and other outcomes, from early pregnancy until the child reaches 2 years of age. Healthy Families America similarly provides regular visiting services but with trained staff that continue for 3 years. The Parents as Teachers program provides biweekly or monthly visits by parent educators who teach child development and parenting skills, with services that can last from before birth to entry into kindergarten. In addition to improving child safety, all three programs also appear to lead to better developmental outcomes and better parenting practices. Separately, Gubbels et al. (2019) conducted a meta-analysis of 51 studies of parenting programs that do not involve home-visiting. They concluded that the programs had modest effects in reducing child maltreatment and that the effects did not vary greatly with the duration of services, service setting, or delivery location. Home-visiting and parental education are the most commonly used prevention programs in the European Union (Sethi et al. 2018). The World Health Organization (2016) also emphasizes prevention through legislation, home-visiting, universal support, and education programs in their resource package to end violence against children.

Interventions for children who have already been maltreated need to be different from standard preventive and parenting-skills interventions. Rates of PTSD among maltreated children are very high – Pecora et al. (2009) estimated that the rates are near those of combat veterans. PTSD and other trauma-induced problems affect the ways that children interact with caregivers and their environment and necessitate alternative trauma-informed parenting and treatment approaches (U.S. Substance Abuse and Mental Health Services Administration 2014), which are increasingly being incorporated into interventions. The Title IV-E Prevention Services Clearinghouse assesses that there is well-supported evidence that two trauma-informed

interventions are effective in reducing the need for out-of-home placements or helping placed children successfully reunite with their families. The Homebuilders–Intensive Family Preservation and Reunification Services program provides intensive in-home services over a short interval of 4 to 6 weeks to children who are at imminent risk of an out-of-home placement. During that interval, therapists provide assessments, cognitive and behavioral strategies, teaching, and other services; a therapist is also available on-call 24 hours a day. Intercept® similarly provides comprehensive, intensive services through a family intervention specialist over periods that range from 4 to 9 months. The program also has on-call support 24 hours a day. More generally, Zhang et al. (2021) undertook a meta-analysis of 15 experimental or quasi-experimental impact studies of trauma-informed care interventions and concluded that the interventions had modest positive effects on child well-being.

Summary

Child maltreatment is a prevalent and costly problem. Millions of children worldwide experience some form of parental maltreatment. Maltreatment has lasting consequences, including poor health, delinquency, lower educational attainment, and intergenerational perpetration of maltreatment. These consequences contribute to inequality and reduce the efficiency and effectiveness of other social investments, costing society trillions of dollars. Considerable work among scholars across disciplines has gone into understanding the risk factors of maltreatment and successful protective policies and interventions. As a result, child abuse has declined over the past three decades in the United States. However, neglect rates have persisted, and there is more work to be done.

This chapter examines child maltreatment through an economic lens, building on theoretical approaches for conceptualizing how different types of maltreatment occur. For example, early work proposed a principal-agent model with a utility maximization framework, which implies physical abuse provides "utility" to the perpetrator. In contrast to this model, abuse can be modeled by a loss of control that arises from stress. Alternatively, neglect that stems from a lack of resources can be explained by a standard household production model with a child quality-quantity framework. Extensions to this model, such as parental time and parenting techniques, can be incorporated into the production of child quality, but these inputs can be impacted by low levels of resources. Understanding how different types of maltreatment arise is important because they have different policy implications. For example, criminal charges for loving parents struggling to provide food and adequate shelter are unlikely to benefit the children. Alternatively, financial resources, like conditional cash transfers, might.

This chapter also provides an overview of available data sources, spotlighting the National Data Archive on Child Abuse and Neglect. Administrative data contain the universe of children that are reported to child welfare agencies and are used to examine trends, risk factors, and policy impacts on child maltreatment. In addition,

these data can be used to understand the administrative processes that take place after a referral arrives and a response is determined. Researchers using these data should be mindful that the incidence of maltreatment is a function of actual maltreatment and the reporting process, which varies substantially across states. Alternatively, survey data provide self-reported accounts of maltreatment, in addition to rich covariates. These data can be used to measure actual incidences of maltreatment and family-level risk factors. Longitudinal surveys and linked administrative data have the benefit of providing outcomes, such as educational attainment and criminal activity, which are advantageous in investigating the development consequences of maltreatment. Finally, this chapter reviews evidence on risk factors and promising interventions. Parent or caregiver factors, such as substance abuse, history of being abused, and depression, are the strongest predictors of child maltreatment, and family factors, such as poverty, are moderately strong predictors of child maltreatment. Two key components of promising interventions include regular, home visits and targeted, trauma-informed services.

Future research has two main directions for economists. First, Bullinger et al. (2020) call attention to the persistent neglect victimization rate and urge researchers to investigate mechanisms of neglect, so that policy can be better informed. In general, more causal evidence is needed to better understand the incidence of maltreatment and effective policies. Some of the causal analyses are limited by the lack of available data, and so longitudinal and linked data are needed. Second, in light of the COVID-19 pandemic, with stay-at-home orders and school closures, and the increased awareness of racial inequalities, especially in the child welfare system, many researchers have started investigating the role mandatory reporters play in detecting child maltreatment. Mandatory reporter legislation will undoubtedly remain a focus for research, as the findings have policy-relevant and feasible implications. For example, modifying mandatory reporters and training requirements is relatively simple compared to subsidized, universal day care. Child welfare, with a particular focus on child maltreatment, is a growing area of research among economists. With increased diversity in scholars, data, and approaches, we can address many of the shortcomings discussed in this chapter to ensure all children grow up in a safe and loving household.

Cross-References

► Behavioral Household Economics
► Costs of Victimization
► Covid-19 and School Closures
► Economics of Adverse Childhood Treatment
► Economics of Obesity
► Economics of Sex Work and Policy Considerations
► Inequality of Opportunity
► Intimate Partner Violence
► Parenting Behavior and Outcomes for Children

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