Child Maltreatment Prevention and the Scope of Child and Adolescent Psychiatry

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KEYWORDS
• Child • Maltreatment • Prevention • Adolescent • Psychiatry

KEY POINTS
• Child maltreatment is one of the most deleterious known influences on the mental health and development of children.
• A review of the risk variables associated with child maltreatment shows that the parents and caregivers of children at risk for maltreatment are themselves victims. Their needs for support programs are often easily ascertained in the early days of their children’s lives, before catastrophic incidents of child maltreatment have occurred. Without these supports, child maltreatment continues to be the largest preventable causal influence on child mental disorder in the United States.
• It is incumbent on child and adolescent psychiatrists to know and ascertain the warning signs among the families of their patients, to recognize and exhaustively pursue opportunities for preventive intervention.
• For those children whose development is potentially compromised by the risk of child maltreatment, it is important that efforts to minimize such risk is sustained, comprehensive, and organized around the needs of individual families, not bureaucracies.
• In a next phase of development in this field, concerted efforts to learn which interventions work, when in the child’s development, targeted toward whom, sustained at what dosage, and for what duration, will bring about cost-effective reductions in the incidence of child maltreatment and consequent improvement in major public mental health outcomes.
Over the past 2 decades, a vast amount of knowledge has accrued regarding the prevalence and consequences of child maltreatment. The toll of these consequences has been confirmed in well-controlled, genetically informative studies showing that child maltreatment is one of the most deleterious known influences on the mental health and development of children.\(^1\) Child maltreatment is preventable\(^3\) but prevalent, affecting at least 1 in 8 US children. The list of child and adolescent psychiatric conditions that are caused or exacerbated by child maltreatment is long, and it can be argued that of all of the influences on child mental disorders, most which are genetic, child maltreatment is the single preventable cause with the highest associated disease burden, approaching 20% or more of the population-attributable risk for all psychiatric conditions of childhood.

Although there are important questions about the effectiveness of the steadily improving array of interventions designed to prevent child maltreatment, there is a need to engage a comprehensive approach to its prevention. There is no longer any question about whether child maltreatment contributes to the medical conditions of child psychiatry, and therefore a major share of the responsibility for the implementation of targeted (or secondary) child maltreatment prevention rests within the scope and science of child and adolescent psychiatry. For the same reasons that the prevention of lead poisoning advanced from the realm of public health departments (primary prevention) to its place in pediatric science and practice (targeted surveillance and prevention for patients at increased risk as identified by medical screening), it is no longer appropriate for child maltreatment prevention to be relegated exclusively to state departments of social services. Furthermore, the threshold for physician engagement must move beyond imminent risk (ie, calls to state child abuse/neglect hotline) to more sophisticated appraisals of highly prevalent risk scenarios that are between the respective scopes of universal primary prevention efforts and emergency intervention by municipal courts after an incidence of abuse or neglect has already occurred. As a clinical determinant of disease, one for which the predictors and consequences are uniquely encountered in child psychiatric practice, child maltreatment in the United States (and many other high-income countries) belongs to child and adolescent psychiatry.

This article briefly reviews a complement of methods that are ready to incorporate into child and adolescent psychiatric practice, by virtue of having established a reasonable evidence base (to be considered an imperfect but necessary starting point). The interventions proposed here have been validated either with respect to the prevention of child maltreatment or with respect to adverse outcomes associated with maltreatment (and primarily focused on enhancing the caregiving environment); they are feasible for integration into clinical decision making, and, most importantly, can be included in the training of the next generation of clinicians. They are summarized in Box 1. However, in relation to the burden of enhancing practice, few if any of these interventions are (or need to be) routinely performed by child psychiatrists alone, but, as with referral to a specialist for ECT or cognitive-Behavior therapy, they constitute methods by which long-term risk for child maltreatment can be managed. This article does not assert that this set of interventions is new or should be restricted to the practice of child psychiatry (there are many disciplines to credit for their development), or that these interventions have never been included in child psychiatric practice. Instead it responds to the state of science, recognizing that not enough is currently done to prepare or equip child and adolescent psychiatrists to implement or advocate for this set of clinical interventions for the families of their patients. In many practice settings, some or all of these methods are unavailable, inaccessible, or unreimbursed. This unacceptable reality is unlikely to change if the
interventions are not accessed whenever possible, used to advantage, and advocated by physicians.

**APPRAISAL OF RISK FOR CHILD MALTREATMENT**

Large-scale studies of family and environmental factors that index risk for officially reported child maltreatment have clarified that a short list of variables represent compelling indications for enhanced surveillance and targeted approaches to maltreatment prevention. The extent to which the presence of these factors raises risk is amplified by their co-occurrence and by the condition of poverty, which affects some 32% of all US children, and with which many of these factors are correlated. Leading predictors are summarized with citations in Box 2. Inventories of these factors have been devised and tested for the ability to specify actionable levels of risk for child maltreatment. As an example of the predictive power of combining 2 risk factors, among Missouri

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*Data from Refs. 11–23*
offspring of parents with alcohol use disorders enrolled in the Collaborative Study on the Genetics of Alcoholism (COGA), Jonson-Reid and colleagues\(^4\) reported that the proportion identified in the state official-report registry for child abuse was 57\% for those whose family incomes were below the federal poverty line versus 7\% for their counterparts above the federal poverty line. Accumulations of more than 2 risk factors, many of which can be reliably ascertained on the first day of an infant’s life, have resulted in predictions of even higher proportions of children ultimately maltreated.

**Home Visitation for Infant/Toddler Patients and Infant/Toddler Siblings of Patients**

For families identified by child psychiatrists with any of the risk factors discussed earlier, and in which there resides an infant (aged birth to 3 years), a case can be made that a referral for nurse home visitation is indicated.\(^24\)–\(^27\) There are numerous models for the delivery of home visitation; they vary with respect to profession of the home visitor (nurse vs case manager vs other paraprofessional), specific populations to which they are tailored, and demonstrated effectiveness for reducing child maltreatment. For a recent exhaustive analysis, entitled [Home Visiting Evidence of Effectiveness Review](http://homvee.acf.hhs.gov/HomVEE_Executive_Summary_2014-59.pdf), see US Office of Planning, Research and Evaluation Report #2014-59. The Nurse Family Partnership model advanced by David Olds and colleagues\(^11\) (2014) has achieved the strongest evidence base with 1 order of magnitude reductions in the incidence of child maltreatment among at-risk groups, but the studies to date have largely been restricted to families with firstborn infants (see also Lanier and Jonson-Reid,\(^28\) 2014). Despite (1) the growing availability of nurse home visitation programs nationally, (2) the current prevalence of child maltreatment, (3) the high frequency with which risk factors for child maltreatment are encountered by clinicians, (4) the availability of methods for the engagement of families at risk in preventive interventions such as home visitation,\(^29\) and (5) the increasingly known impact of the intervention, the proportion of all US children in the 2011 to 2012 birth cohort who did not receive a single home visit during the first 3 years of life was 86\% (http://datacenter.kidscount.org/). These statistics delineate lost opportunity for child maltreatment prevention. At present it is rare for successful referrals to home visitation to be initiated by mental health specialists (as opposed to providers of primary obstetric, newborn medicine, and pediatric care) despite child psychiatric populations being highly enriched (more so than any other medical specialty) for young families at combined inherited and environmental risk for child maltreatment and its consequences.

**Evidence-Based Parenting Education and Parent-Child Interactional Therapy**

Although the current generation of evidence-based parent training programs have yet to be systematically assessed with respect to the prevention of child maltreatment per se, it stands to reason that those that effectively prevent or reduce clinical behavioral abnormalities in children (see Presnall and colleagues,\(^30\) 2014) should necessarily reduce maltreatment risk because they are centered on the modification of maladaptive parenting behavior. Among evidence-based parenting education programs, the 2 that have shown the most promise for child maltreatment prevention are Triple P, an intervention that is scaled to the needs and risk level of each individual family (see Prinz and colleagues for a promising large-scale study, conducted by the developers of the intervention, of impact on maltreatment) and The Incredible Years, a group-based parenting education program (see Hurlburt and colleagues\(^31\) for description of a trial among families that self-reported child maltreatment). These and other evidence-based parent training curricula are becoming increasingly available nationwide, but are rarely systematically implemented in child psychiatric practice. An
extensively validated therapeutic variation on the theme of parent training, parent-child interactional therapy, has steadily gained traction as a standard facet of treatment of young children manifesting clinical behavioral abnormalities; a recent innovative analysis of the utility of the intervention for child maltreatment prevention was very promising and warrants replication.22

Other Evidence-Based Interventions in the Prevention of Child Maltreatment

When primary caregivers have limitations in their ability to ensure around-the-clock safety to children under their care, surrogate caregiving environments, including high-quality child care and foster care, become lifelines for families. These expensive propositions are often reserved for the aftermath of a first incidence of abuse or neglect, but novel interventions that enhance the level of sensitive-responsive care by surrogates in such environments are proving capable of promoting resilience in youth at risk and improved outcomes for their families.32 Note that, in a large administrative-data study of chronic, official-report child abuse or neglect, Jonson-Reid and colleagues33 showed that children who experienced a single episode of official-report maltreatment, but no further occurrences, incurred rates of mental health care use that were not significantly increased compared with those of children in the general population. Thus, interventions designed to prevent child maltreatment recidivism (discussed later) are as important and potentially potent as those that are designed to prevent its initial incidence. Kessler and colleagues34 showed significant reductions in adult mental disorders among foster care alumni (primarily school aged) who had been enrolled in a model case management program in which their case managers had higher levels of training and lower caseloads than was the case for usual care. The outcomes of other efforts to enhance the foster caregiving environment (eg, via multidimensional treatment foster care, a wrap-around multimodal intervention for foster families of children and adolescents with challenging behavior) have been promising and warrant further study.34,35

In general, the proactive implementation of case management services for families at risk (ie, before maltreatment occurs rather than afterward) has garnered a growing evidence base36–39 and should become a high priority for conversion from its currently exclusive role in treatment to a role in targeted preventive intervention. The reduction of risk for maltreatment outside of primary caregiving environments is best exemplified by manualized bullying prevention curricula, which, despite free access (http://www.stopbullying.gov/) and a large evidence base documenting unequivocal impact, remain underutilized and not familiar enough to practicing child and adolescent psychiatrists.

In addition, more than a decade ago, Zeana and colleagues40 reported on the naturalistic results of a family court collaboration with an academic division of child psychiatry (Tulane University, New Orleans, LA), in which child psychiatrists with expertise in infancy participated in the disposition planning and support of young children in foster care. The program, which has been continuously subsidized by local government funding to the present time, conducts serial, comprehensive appraisals of health, mental health, and social factors that influence risk for abuse and neglect recidivism in each case. Notably, the clinicians deliver regularly updated intervention recommendations to the court, and these include specifications regarding safety of visitation, the provision of mental health treatment to birth parents whenever necessary, continuous appraisal of the quality of the parent-child relationship, and ultimately comprehensive medical recommendations to the court detailing necessary parameters and supports for safe reunification. The program reduced (by more than half) the occurrence of maltreatment recidivism compared with a matched group of
children who did not receive the intervention. A recent attempt to replicate the Tulane approach for young children at extreme high risk resulted in similarly low levels of child maltreatment recidivism. The program serves as a prototype for what are currently referred to as two-generation interventions; other successful examples are described by Shonkoff and Fisher, and the effectiveness of treatment of parental mental health conditions on the outcomes of children was recently reviewed in an important meta-analysis conducted by Siegenthaler and colleagues.

SUMMARY AND FUTURE DIRECTIONS

A review of the risk variables associated with child maltreatment highlight that the parents and caregivers of children at risk for maltreatment are themselves victims. They are in need of programs that are increasingly available and well established. Their needs for those supports are often easily ascertained in the early days of their children’s lives, before catastrophic incidents of child maltreatment have occurred. Without these supports child maltreatment continues to be the largest preventable causal influence on child mental disorder in the United States. It is thus incumbent on child and adolescent psychiatrists to know and ascertain the warning signs among the families of their patients, to recognize and exhaustively pursue opportunities for preventive intervention. To do this they should become experts in the emerging science of child maltreatment prevention.

Note that in child psychiatry there is rarely such a thing as a one-time inoculation against mental disorder, or, for that matter, against maltreatment. Behavior is complex, adaptive, and highly evolved (with many checks and balances). Often when things go awry the causes are multifactorial. For those children whose development is potentially compromised by the risk of child maltreatment, it is important that efforts to minimize such risk are sustained, comprehensive, and organized around the needs of individual families, not bureaucracies.

The current generation of specialists in child mental health, clinicians and researchers alike, need to be trained in these methods and to be integral proponents of the advancing frontier of preventive intervention. In the next phase of development, concerted efforts to learn which interventions work, when in the child’s development, targeted toward whom, sustained at what dosage, and for what duration, will bring about cost-effective reductions in the incidence of child maltreatment and consequent improvement in major public mental health outcomes. Embedding such intervention efforts in genetically and/or developmentally informative sampling designs with robust outcome measurements will ensure that the agenda of separating “baby from bathwater” in preventive intervention will itself contribute to the steady advancement of behavioral neuroscience.

REFERENCES


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