The Safe Environment for Every Kid Model: Promotion of Children’s Health, Development, and Safety, and Prevention of Child Neglect

Howard Dubowitz, MD, MS, FAAP

Abstract

Child neglect is by far the most prevalent form of child maltreatment. There is a need to try to prevent this problem, and pediatric primary care offers an excellent opportunity. This article describes one such approach, the Safe Environment for Every Kid (SEEK) model. SEEK enables practitioners to identify and help address psychosocial problems facing many families. These include parental depression, substance abuse, major stress, intimate partner violence, harsh punishment, and food insecurity—problems that have been associated with neglect. Two large randomized, controlled trials yielded promising findings. Materials are now available to help practitioners implement this evidence-based practical model, thereby enhancing the primary care provided to children and their families.

Neglect is by far the most common form of child maltreatment. Over three-fourths of reports to child protective services (CPS) involve neglect. A community survey in 2006 found the frequency of neglect to be 30.6 per 1,000 children, compared to rates of 6.5, 2.4, and 4.1 for physical, sexual, and emotional abuse, respectively.

Pediatricians regularly encounter varied forms of child neglect. Examples are instances in which children’s basic needs are not adequately met such as nonadherence with medical care, delay in obtaining medical care, children who are fed inadequately, and lapses in supervision that contribute to repeated ingestions and/or accidents. Neglect is not as benign as the term suggests.

Neglect can have substantial short- and long-term effects on children’s physical and mental health and cognitive and social development. Examples include fatalities, impaired brain development, inferior academic performance, and emotional and behavioral problems. Even decades later, in adulthood, effects of childhood neglect can resurface with liver and heart disease as well as depression and suicidality.

Neglect poses a challenge for pediatricians because of uncertainties regarding what actually constitutes neglect and how best to address it. Even more important is the question of how to prevent neglect. This article focuses on one evidence-based approach to the prevention of childhood neglect.

In 1975, Haggerty et al. coined the term “the new morbidity.” Advances in antibiotics, nutrition, and immunizations dramatically changed the landscape of children’s health in the US. This allowed new attention to be directed to problems (not exactly new) such as the impact of divorce, parental substance abuse, abuse, and neglect on children. This naturally had implications for pediatric practice—how would pediatricians address the psychosocial problems facing many families? In fact, many pediatricians felt they were not equipped with the knowledge or the skills to tackle these problems.

In response, the American Academy of Pediatrics led a national effort, “Bright Futures,” to guide practice, including consideration of the child’s critical environment in the home and family. In addition, neuroscience has over recent years lent new insight into the impact of stress on the developing brain and the neuroendocrine system, potentially explaining how adverse childhood experiences, such as neglect, lead to harm.

**PEdiATRIC pRIMARY CARE AND PREVENTION**

There are many reasons why pediatric primary care offers a valuable opportunity for helping to prevent childhood neglect and abuse. There is an existing system of healthcare; most children have multiple checkups, especially in the first 5 years. The focus of this care is prevention and the early identification of problems. It is not sufficient for health care professionals to focus narrowly on just the child. Attention should also be devoted to the home and family environment, which naturally influences a child’s overall health, development, and safety. A useful advantage of pediatric primary care is that it does not have the stigma often associated with child welfare and mental health. Indeed, there is usually a good relationship between child health professionals and parents, offering an excellent opportunity to learn about the family and help address identified problems. With such an opportunity, there is a responsibility to help.

Child health professionals can provide parental guidance in varied ways on topics such as smoke alarms and car seats to include other environmental hazards, such as parental substance abuse (ie, social toxins). Thus, the Safe Environment for Every Kid (SEEK) model was developed to help practitioners identify and begin to address targeted risk factors for neglect (and abuse) in families with young children. In this way, SEEK aims to strengthen families, support parents, and thereby promote children’s health, development, and safety—as well as helping to prevent neglect and abuse.

**What Risk Factors Should Be Targeted?**

Research and clinical experience have identified prevalent behaviors associated with child neglect: parental depression, major parental stress, substance abuse, intimate partner (or domestic) violence, food insecurity, and harsh punishment. We prioritized problems for which resources were generally available (eg, drug treatment), and opted not to tackle others, such as the need for low-income housing, for which resources are usually scarce. Thus, the problems targeted by SEEK are hardly all that families confront. Nevertheless, addressing these pervasive problems should significantly help many families, without overwhelming health professionals. It may appear ideal to address all the problems facing a family, but that may not be essential. Instead, for example, helping a parent obtain treatment for depression may set in motion a cascade of positive changes.

**What About Protective Factors?**

It has become increasingly clear that “deficit models” focusing only on people’s problems are inadequate. Most people also have strengths and resources...
(ie, protective factors) that help counter the impact of risk factors. Those should also be identified to establish a foundation of how to help. For example, the child health professional can express to a parent how obvious it is that they love their child, and that getting substance abuse help will also benefit their child. This illustrates the use of a protective factor—the parent’s wish for the child to be healthy. The health professional can also be considered a protective factor—by conveying empathy and an interest in helping. In such ways, the SEEK model incorporates the use of protective factors to intervene effectively in helping address a parent’s problem.

**THE SEEK MODEL**

Core Components of the SEEK Model

1. Training child health primary care professionals to briefly assess and to help address targeted psychosocial problems.
   - It’s important that primary care professionals serving children are prepared to address the problems, such as parental depression. Many have not been trained in such areas.
   - Principles of motivational interviewing are incorporated to help engage parents. In contrast to the traditional hierarchical approach in medicine with the “wise” physician prescribing what to do, motivational interviewing begins with clarifying the parent’s view of an issue. Then, guided by this understanding, the professional engages the parent in jointly developing a plan.
   - Professionals are encouraged to also identify and utilize parents’ strengths and resources.
   - It is unrealistic to expect busy child health professionals to spend too much time probing parent’s problems. The health professional’s role in SEEK is limited: helping identify problems that are often masked, briefly clarifying the nature of the problem, initially addressing the problem, and facilitating help from other community resources. In this way, a skilled professional can play a pivotal role in a strategic few minutes.

2. The SEEK Parent Questionnaire (SEEK PQ) offers a practical, efficient, and evidence-based way to systematically screen for the targeted problems.
   - My colleagues and I developed the SEEK PQ for parents to complete, voluntarily, before selected checkups. Parents can do so while waiting and then give the PQ to the health professional at the start of the visit. The PQ has 15 “yes/no” questions in a user-friendly format for both the parents and professionals. It takes about 3 minutes to complete.
   - The SEEK PQ is based on a careful evaluation of findings from two large studies.
   - One challenge is eliciting “socially undesirable” information, such as domestic violence, that a parent may be embarrassed to disclose. To help address this, the PQ begins with: “Dear Parent or Caregiver: Being a parent is not always easy. We want to help families have a safe environment for kids. So, we’re asking everyone these questions. They are about problems that affect many families. If there’s a problem, we’ll try to help.” Building on the longstanding concern with children’s safety is helpful; it’s familiar to both professionals and parents. Asking everyone in the practice these questions should include a brief video and supplemental materials.

3. The Reflect-Empathize-Assess-Plan (REAP) approach. To help clinicians, we developed the REAP approach to address problems identified by the SEEK PQ.
   - Reflect. The professional briefly reflects back what the parent disclosed on the SEEK PQ (“it looks like you’ve been feeling down lately”). This conveys acknowledgment of what the parent has shared, and that it’s not the clinician’s assessment.
   - Empathize. A brief empathic statement conveys caring and helps strengthen the connection for intervening effectively (eg, “it must be hard on you, and on your kids, feeling this way”). By mentioning the children, one also signals the likely impact on them too.
   - Assess. The professional has mostly a triage role. Thus, the scope of a brief assessment is to characterize the nature of the problem, what help may already be in place, a parent’s interest in help, and to address possible barriers to getting help. Priority questions and the SEEK algorithms help clinicians with these assessments. Those in family medicine, however, may play a larger role.

4. Plan. SEEK offers a way to en-

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**Building on the longstanding concern with children’s safety is helpful.**

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engage parents through motivational interviewing and planning the intervention, together with the parent. Some parents may be reluctant to address, for example, their depression. Nevertheless, the health professional has hopefully sowed a seed, conveying the importance of the problem and an interest in helping. These parents may be ready to engage at a later time.

4. Ideally, a mental health professional is available in the primary care setting to help assess and briefly address problems and facilitate referrals to community resources.

- In two randomized, controlled trials, health professionals and parents had discretion about whether to involve a social worker. Some health professionals preferred to address problems themselves, given their relationship with the family. Some parents preferred talking with their pediatrician or nurse practitioner, rather than a social worker. When involved, the social worker tailored her approach to meet the needs of individual parents, and occasionally provided crisis intervention, but did not engage in extended therapy. Much of this was done by phone.

- Many pediatric settings, however, do not have a mental health professional. This role can mostly be played by a trained physician or nurse practitioner, with office staff facilitating referrals. The SEEK training helps prepare professionals to do this.

- In developing SEEK we had to be very practical, recognizing the time constraints in a busy practice. SEEK is therefore premised on brief, focused interventions. For example, by identifying a parent’s possible depression, the professional can point out how that makes it hard to be a good parent, and that many parents are helped by counseling. Motivating the parent to engage in an evaluation and facilitating a referral may lead to treatment.

5. SEEK Parent Handouts

- Relatively simple, brief parent handouts on the targeted problems offer a useful adjunct to the clinician’s advice. These SEEK Parent Handouts provide basic information in a user-friendly way and list national hotlines and websites of organizations with good resources for parents. There is space to customize the Handouts for a specific practice and to include information on local resources.

**THE EVIDENCE SUPPORTING SEEK**

There has been a healthy development in medicine and social sciences insisting that interventions be rigorously evaluated—a most reasonable request given the potential ramifications on peoples’ lives, as well as the fiscal costs. Two large randomized, controlled trials have been conducted on SEEK: (1) the first in pediatric resident “continuity” or training clinics serving a low-income, mostly African American, urban population, and (2) the second in 18 suburban private pediatric practices serving a relatively low-risk, middle-income, mostly white population. The findings have been quite promising.

The main goal in these trials was to see whether we could prevent abuse and neglect.

Impact on Health Professionals

Our team realized that improving health professionals’ thinking and practice regarding the risk factors was a critical first step if the project was to succeed. The trials aimed to determine whether health professionals trained in implementing the SEEK model would report improved attitudes, knowledge, comfort, competence, and practice behavior regarding the targeted psychosocial risk factors, compared to those providing standard pediatric primary care. We also assessed practice by reviewing the children’s medical records, and in the second study directly observing visits. Finally, we examined whether parents in SEEK practices would be more satisfied with their child’s doctor or nurse.

In the first study with 95 residents, those implementing SEEK reported greater improvement in their thinking and behavior regarding four of the six targeted problems than did controls, and the improvement was sustained 18 months after the initial training.24 They were more likely than controls to screen and assess parents for the risk factors. Additionally, parents in the SEEK clinics reported more favorable views of their child’s doctor.

The second study involved 105 pediatricians and pediatric nurse practitioners.25 Compared to controls, health professionals implementing SEEK felt more competent and comfortable addressing several targeted problems, and they screened for them more often. These improvements were sustained for up to 36 months. Researchers are often thrilled when interventions show short-term success; sustaining improvements is difficult. In this light, these findings are especially encouraging.

Impact on Child Maltreatment

The main goal in these trials was to see whether we could prevent abuse and neglect. In the first study involving 558 families attending university-based, inner-city clinics, SEEK children were significantly less likely to be maltreated—measured four ways—compared to those receiving standard primary care: fewer CPS reports (13.3% vs 19.2%), fewer instances of possible medical neglect documented in their medical record as nonadherence or “noncompliance” (4.6% vs 8.4%), fewer with delayed immunizations (3.3% vs 9.6%), and fewer instances of “severe physical assault” reported by parents.14

In the second study of 1,119 relatively low-risk families, initially and after 12 months, SEEK mothers reported less “psychological aggression” and fewer
instances of “minor physical assault” (mostly corporal punishment) than did controls.\textsuperscript{15} There were few instances of child maltreatment (CM) documented in the children’s medical records and few CPS reports in this low-risk sample.

SEEK did not require additional time on average for health professionals to address psychosocial problems.\textsuperscript{15} Accounting for how to best allocate limited prevention dollars, we analyzed fiscal data from the second SEEK study: cost per family was $5.12, and $122 per case of psychological aggression or physical assault averted.\textsuperscript{26} Providing the SEEK model to 100,000 families could potentially prevent CM in about 4,200 children, saving $37 million. Expansion of the SEEK model in pediatric primary care may reduce the medical, mental health, and social service costs associated with CM.

**INTERPRETING THESE FINDINGS**

The findings from the two trials provide good evidence that the SEEK model of enhanced pediatric primary care may help prevent CM. The findings in the high-risk sample are especially striking: 31% fewer CPS reports in the SEEK group compared to controls. This was supported by evidence from the children’s medical records and by what parents reported. The reduction in CPS reports suggests that for every 17 similarly high-risk families receiving the SEEK model of pediatric primary care, abuse or neglect can be prevented in one of these families.

The findings in the second study in a relatively low-risk population, while less striking, are still quite promising. It is noteworthy that there are relatively few interventions to prevent CM in middle-income families. While probably less frequent, abuse and neglect do occur in these families. We did find that psychological aggression and minor physical assaults were common in the low-risk sample. These experiences would probably not meet legal definitions of neglect or abuse, and CPS agencies would likely screen out such reports. Clearly, CPS reports reflect only a small fraction of the maltreatment children experience, guided by state laws and policies that focus on relatively egregious circumstances. Ample evidence, however, indicates that corporal punishment can jeopardize a child’s development, with substantial and lasting harm.\textsuperscript{27} Psychological (or emotional) maltreatment may be the most damaging of all forms of maltreatment.\textsuperscript{28}

Given the stronger findings in the first group, an important question arises: should SEEK be implemented only in similar high-risk settings? While some may argue the evidence justifies prioritizing such families, there is another consideration. Preventing potentially damaging experiences (eg, psychological aggression) in a small percentage of families can still have valuable, far-reaching benefits at a population level; the low-risk sample likely represents a broad swath of American families. Of 75 million children in the US, an intervention that results in 5% fewer of them experiencing psychological aggression may be fruitful. Also worth considering is that even though some risk factors were rarely reported by low-risk parents (eg, domestic violence), others were quite prevalent (eg, alcohol abuse, 8%). Clearly, middle- and higher-income families are hardly immune from such problems. Finally, aside from lowering the rate of CM, helping address prevalent psychosocial problems should help strengthen families, support parents, and promote children’s health, development, and safety. The theory and hope underpinning interventions such as SEEK is that they may yield far-reaching benefits, beyond preventing neglect and abuse.

**IMPLEMENTING SEEK**

Changing individual behavior is never easy, and changing systems is still harder. SEEK involves a modest, yet substantial change to the current system of pediatric primary care in the US. One looming question is whether many health professionals will modify their practice and implement SEEK. There appears to be interest among pediatricians to respond to psychosocial problems facing many families.\textsuperscript{9} Equally as important, it appears that parents are interested in being helped in this area.\textsuperscript{29} With such interest, changes to pediatric primary care are clearly possible.

However, adding to the plate of busy practitioners is a challenge. In developing SEEK, we were well aware of time constraints. The SEEK online training materials are an added resource, and prioritize information to gather and how to briefly intervene. Assistance from a social worker seemed important, complementing health professionals’ efforts to assess and address identified problems. To limit costs, the social worker in the second study divided her time among seven SEEK practices, while being available to those professionals and parents during regular work hours. Surprisingly, despite excellent relationships, she was underutilized, and much of her work was by phone. It may be possible to lower costs by having a social worker cover more practices and provide assistance only by phone. There is support for the effectiveness of such psychosocial phone interventions.\textsuperscript{30} As suggested earlier, it’s also possible that a health professional alone can briefly assess a problem and do the initial planning, with a staff member facilitating a referral. The SEEK training prepares health professionals to play this role. In addition, many pediatric settings are integrated with mental health such as in Federally Qualified Health Centers.

Another challenge is how to modify current practice and widely implement SEEK. SEEK appeals to health professionals’ interest in providing excellent care and being responsive to children’s
appears to be valuably cost saving. In sum, SEEK offers a practical model that should substantially enhance pediatric primary care and benefit many families and children. 14,15,26

The model has been recognized as a promising practice to reduce child abuse and neglect by the US Agency for Healthcare Research and Quality on their Innovations website, and is included in materials of the American Academy of Pediatrics’ Bright Futures™. SEEK was also highly rated by the California Evidence-Based Clearinghouse for Child Welfare. The American Board of Pediatrics and the American Board of Family Medicine have approved SEEK for Maintenance of Certification levels 2 and 4, and Continuing Medical Education credit is available through the University of Maryland School of Medicine.

Table 1

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<th>TABLE 1. What Is Needed to Implement SEEK?</th>
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<td>• Professional interest to enhance the quality of child healthcare by helping address prevalent psychosocial problems facing many families</td>
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<td>• At least one health professional in a practice to ‘champion’ the project and to lead SEEK’s implementation</td>
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<td>• At least one staff member such as the office or clinic manager to help lead the effort</td>
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<td>• A commitment to complete the SEEK online training</td>
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CONCLUSION

Developing strategies to help prevent neglect and abuse and to promote children’s health, development, and safety is greatly needed. After two rigorous studies, the SEEK model appears promising and there is interest in its implementation. Some may argue that the evidence is not enough to justify taking the model to scale. However, others think it is adequate and point to many areas of current practice with skimpy evidence. SEEK does not appear to have any negative outcomes, did not involve more professional time, and

needs. 31 Some aspects of current practice are rarely useful, such as examining the belly of a healthy 3-year-old, and could be dropped. This would free up time to address more pressing priorities. Financial incentives would no doubt help, as when third party payers cover screening for developmental problems or parental depression. Hopefully, the increasing attention to the “medical home” through the Affordable Care Act will lead to better reimbursement for more comprehensive care. There are a few core ingredients for implementing the SEEK model in a pediatric primary care setting (Table 1).

REFERENCES

26. Lane W, Dubowitz H, Frick K, Semiatin J,


