Training Pediatric Residents in a Primary Care Clinic to Help Address Psychosocial Problems and Prevent Child Maltreatment

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ABSTRACT

OBJECTIVE: The objectives of this study were to determine whether 1) residents trained in the *SEEK* (A Safe Environment for Every Kid) model would report improved attitudes, knowledge, comfort, competence, and practice regarding screening for psychosocial risk factors (parental depression, parental substance abuse, intimate partner violence, stress, corporal punishment, and food insecurity); 2) intervention residents would be more likely to screen for and assess those risk factors; and 3) families seen by intervention residents would report improved satisfaction with their child's doctor compared to families receiving standard care from control residents.

METHODS: Pediatric residents in a university-based pediatrics continuity clinic were enrolled onto a randomized controlled trial of the *SEEK* model. The model included resident training about psychosocial risk factors, a Parent Screening Questionnaire, and a study social worker. Outcome measures included: 1) residents' baseline, 6-month, and 18-month posttraining surveys, 2) medical record review, and 3) parents' satisfaction regarding doctor-parent interaction.

RESULTS: Ninety-five residents participated. In 4 of 6 risk areas, intervention residents scored higher on the self-assessment compared to control subjects, with sustained improvement at 18 months. Intervention residents were more likely than control subjects to screen and assess parents for targeted risk factors. Parents seen by intervention residents responded favorably regarding interactions with their doctor.

CONCLUSIONS: The *SEEK* model helped residents become more comfortable and competent in screening for and addressing psychosocial risk factors. The benefits were sustained. Parents viewed the intervention doctors favorably. The model shows promise as a way of helping address major psychosocial problems in pediatric primary care.

KEYWORDS: child maltreatment; prevention; psychosocial risk factors; residency

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WHAT'S NEW

The *SEEK* model incorporates psychosocial risk factor screening into practice. Residents report sustained improvement in their ability to screen and identify problems. Families are more likely to be screened. This model shows promise to meet the need for training in this area.

SCREENING FOR PSYCHOSOCIAL risk factors is an increasingly important aspect of the pediatrician's role.[1] The American Academy of Pediatrics programs such as Practicing Safety and Bright Futures suggest that physicians should discuss and monitor for risk factors such as intimate partner violence (IPV), family stress, maternal depression, and effective disciplinary strategies.[2–4] Maryland, as well as other states, has incorporated family psychosocial assessments in their EPSDT (Early Periodic Screening, Diagnosis, Treatment) schedules.[5,6] Screening for these risk factors may not only improve child outcomes, but may also help prevent child maltreatment, which remains a pervasive problem.[7]

Physicians have multiple opportunities to screen for psychosocial risk factors during child health supervision visits. However, surveys suggest there are gaps in physician's knowledge and skills, as well as discomfort with addressing these issues.[8–11] Residents who learn how to address family psychosocial problems may be more likely to screen for those issues when they are in practice.[11,12] Pediatric residency, and in particular, the continuity experience, is a unique opportunity for faculty to influence the attitudes and behaviors of future pediatricians. It is also an opportunity for future physicians to apply new skills in identifying and addressing psychosocial issues.

To address these gaps in knowledge, skills and comfort, the *SEEK* project (A Safe Environment for Every Kid) was developed to assess whether pediatric residents, with special

training, could assess and address targeted psychosocial factors that affect children's health, development and safety in the context of primary care.[7] The current study evaluates one component of the *SEEK* project, focusing on the effectiveness of the model on residents' thinking and behavior, and parents' perceptions of their child's pediatrician.

The study had 3 hypotheses. The first was that implementation of the *SEEK* model would improve pediatric residents' attitudes, knowledge, comfort, perceived competence and practice regarding targeted psychosocial risk factors (parental depression, substance abuse, IPV, stress, corporal punishment and food insecurity). The second hypothesis was that intervention residents would screen parents more often, and would be more likely to identify and further assess parental problems, compared to control residents. Third, parents bringing children to see the intervention residents would report improved satisfaction compared to families receiving standard care from control residents.

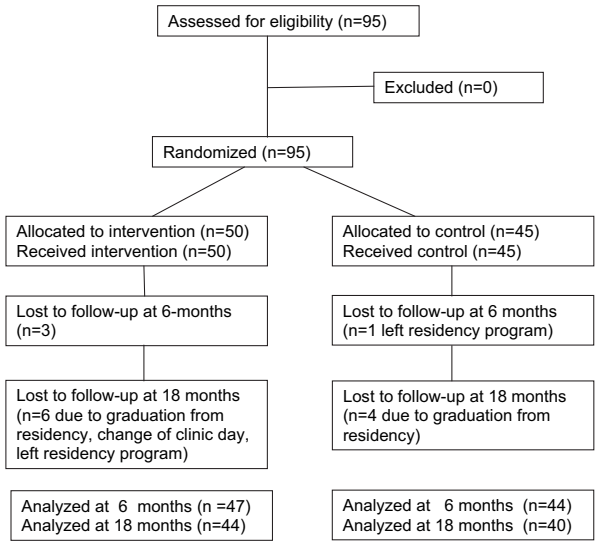

Figure 1. *Revised template of the CONSORT diagram showing the flow of participants through each stage of a randomized trial.*

METHODS

SETTING

The study took place in the primary care continuity clinics of a medium-sized, inner-city pediatric practice, serving children 0–18 years of age. The clinic had approximately 9,000 registered children, with 14,000 visits per year. Eighty percent of the families received Medicaid insurance.

SAMPLE

The pediatric residency program has approximately 60 residents annually. The study sample consisted of the categorical pediatric and combined medicine-pediatrics residents who provided care in the continuity clinic. These residents were assigned to a specific clinic day, and attended a clinic session once per week throughout their training, providing primary pediatric care to a panel of patients. All residents were invited to participate, and all agreed. In the first year of the study, all residents, regardless of their year of training, were recruited and participated. In subsequent years, interns were recruited, while previously trained residents remained in the study.

PROCEDURES

The university's Institutional Review Board approved the study protocol; informed consent was obtained from all participants. Continuity clinic days were randomized to either intervention or control by coin toss. Residents were included in either the intervention or control group on the basis of their assigned clinic day. Residents' assignments are made in such a way that the number of residents from each training year is balanced across clinics. Attending physicians monitored all resident decisions. The study began in the summer of 2002. In the first wave, all 52 residents, regardless of training level, were recruited into the study. In subsequent years, new interns, as well as upper level residents who transferred into the residency program, were included. In the 3 subsequent waves, 12, 13, and 18 residents were included in the study, respectively.

Parents who brought their child (0–5 years) for a child health supervision (CHS) visit with a resident were recruited to evaluate the *SEEK* model. Inclusion criteria were English-speaking parents who did not have another child in the study. Exclusion criteria were children in foster care. Parents who agreed to participate in the evaluation were given an appointment to complete a computerized study protocol in a nearby study office within 2 weeks. The evaluation included a measure of parents' satisfaction with their child's physician. The evaluation was repeated 6 months later. At the time of the evaluations, the residents had been in the study for variable time periods. Therefore the first evaluation was not a true baseline, but represents an early outcome. The flow chart (Fig. 1) describing recruitment of families has been published.[7]

THE *SEEK* MODEL

Parent Screening Questionnaire

The Parent Screening Questionnaire (PSQ) is a 20-item yes/no screen for the 6 targeted psychosocial risk factors noted above. It has adequate stability and validity.[13–16] The PSQ was given to all parents bringing their child for a CHS visit to an intervention clinic. PSQ responses were reviewed by the resident during the visit. Completing the PSQ was optional.

Training

Intervention residents received 8 hours of training in small group discussion sessions, conducted by an interdisciplinary faculty including pediatricians, a social worker and a psychologist. Clinic preceptors were invited, but attendance was variable. Training focused on 6 psychosocial risk factors: parental depression, parental substance abuse, IPV, stress, corporal punishment, and food insecurity. Residents learned about how these issues affect children's health, development and safety. The sessions