Use of a Brief Standardized Screening Instrument in a Primary Care Setting to Enhance Detection of Social-Emotional Problems Among Youth in Foster Care

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ABSTRACT

OBJECTIVE: To determine whether systematic use of a validated social-emotional screening instrument in a primary care setting is feasible and improves detection of social-emotional problems among youth in foster care.

METHODS: Before-and-after study design, following a practice intervention to screen all youth in foster care for psychosocial problems using the Strengths and Difficulties Questionnaire (SDQ), a validated instrument with 5 subdomains. After implementation of systematic screening, youth aged 11 to 17 years and their foster parents completed the SDQ at routine health maintenance visits. We assessed feasibility of screening by measuring the completion rates of SDQ by youth and foster parents. We compared the detection of psychosocial problems during a 2-year period before systematic screening to the detection after implementation of systematic screening with the SDQ. We used chart reviews to assess detection at baseline and after implementing systematic screening.

RESULTS: Altogether, 92% of 212 youth with routine visits that occurred after initiation of screening had a completed SDQ in the medical record, demonstrating high feasibility of systematic screening. Detection of a potential mental health problem was higher in the screening period than baseline period for the entire population (54% vs 27%, $P < .001$). More than one-fourth of youth had 2 or more significant social-emotional problem domains on the SDQ.

CONCLUSIONS: Systematic screening for potential social-emotional problems among youth in foster care was feasible within a primary care setting and doubled the detection rate of potential psychosocial problems.

KEYWORDS: foster care; social-emotional; youth

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WHAT'S NEW

Systematic screening of youth in foster care for socioemotional problems is feasible in a primary care setting and markedly improves detection of socioemotional problems in this high-risk population.

ALTHOUGH THE AMERICAN Academy of Pediatrics recommends routine mental health surveillance and periodic mental health screening of all children,[1] most health providers are not yet integrating systematic social-emotional screening into pediatric practice.[2–6] Youth in foster care represent an at-risk group[7–9] likely to have experienced prior preplacement trauma, abuse, neglect, and separation from family.[10,11] Not surprisingly, prevalence rates for mental health problems for children in foster care are significantly higher than that for the general population and range from 40% to 80%, depending on the sample and method of ascertainment.[12,13] National guidelines recommend that children and youth in foster care receive a full mental health evaluation after entry into foster care[14]; however, given the shortage of psychiatrists,[15] primary health providers may have difficulty accessing services for all those needing mental health care. Hence, it is vital to establish standardized screening practices in primary care settings using validated instruments to identify and triage children with the greatest mental health needs.

The primary care site is a logical location to implement standardized screening. Youth entering foster care should have access to primary care for a health assessment, an opportune time for mental health screening. We evaluated the usefulness of systematic psychosocial screening using the Strengths and Difficulties Questionnaire (SDQ) in a primary care practice serving youth in foster care. Our study had 2 objectives: (1) to assess the feasibility of using youth and foster parent-completed psychosocial screening

instruments to assess the social-emotional health of youth in foster care at routine well-child visits; and (2) to measure the impact of systematic screening on detecting social-emotional problems.

METHODS

SETTING

Starlight Pediatrics is a general pediatric practice, and pediatric medical home that has been providing primary care for all children and adolescents in family-based foster care in Monroe County, New York (700 children, 3400 visits per year), for nearly 2 decades.

MENTAL HEALTH SCREENING INSTRUMENT

The SDQ is a validated, 25-item, 1-page behavioral assessment tool available in parent and youth versions for ages 11 to 17 years.[16] The questionnaire includes 5 domains: Emotional Problems, Conduct Problems, Inattention/Hyperactivity, Peer Problems, and Prosocial Problems (to indicate lack of prosocial skills). It has been previously validated in both clinical and nonclinical settings, and has been used cross-culturally[17] and as a screening instrument.[18] To our knowledge, this tool has not been applied to a community-wide sample of U.S. children in foster care, although it has been validated in a foster care sample in the United Kingdom, which examined data by overall screening efficiency compared with structured interviews.[19]

SUBJECTS, SCREENING, AND REFERRAL PROTOCOL

Before the practice change, no standardized mental health forms were completed at routine health visits although health care providers were already highly attuned to potential mental health problems of this population, and the medical chart had a specific mental health assessment section. In September 2007, Starlight Pediatrics implemented routine psychosocial screenings, using the SDQ, as the standard of care for youth aged 11 to 17 years. The SDQ was not administered to youth with severe developmental delay or who were not English-speaking. Nurses provided the SDQ form to youth (and to foster parents when available) to complete in the examination room while waiting for the medical provider. Providers reviewed the SDQ during the visit, but formal scoring was completed after the visit and included in the medical chart. Consistent with the prescreening time period, the social worker continued to make all subspecialty mental health referrals requested by providers as per clinic practice. We held monthly meetings with clinical staff and the director of the university-based outpatient pediatric mental health clinic to provide feedback regarding the use of the SDQ in our primary care setting.

STUDY DESIGN AND STUDY POPULATION

Feasibility of standardized screening (Objective 1) was measured as the percentage of SDQs completed during routine well-child visits after screening was initiated.

Impact of standardized screening (Objective 2) involved a before and after study design. To assess baseline detection rates, we reviewed all medical charts of youth aged 11 to 17 years who were in foster care and had a well-child visit between 7/1/05 and 6/30/07 (before systematic screening) for the detection of social-emotional problems (baseline cohort). The screened cohort consisted of youth seen between 9/11/07 and 12/31/09, after the implementation of standardized mental health screening. For youth who completed more than one SDQ questionnaire during this time period, we examined only the first SDQ results.

MEASURES

DEMOGRAPHIC VARIABLES

Data extracted included the youth's gender, race/ethnicity, and age. These 3 variables have been found, in prior studies, to be associated with mental health problems and access to care.[20,21] We stratified age into early adolescence (11 to 14 years) and middle adolescence (15 to 17 years), consistent with prior studies.[22]

DEPENDENT VARIABLE: BASELINE (PRESCREENING) COHORT

We reviewed the medical charts of the Baseline Cohort and used the first preventive health visit during the selected time period for data extraction. The primary dependent variable was a social-emotional problem (categorized to be consistent with SDQ domains) noted in the medical chart in any of the following for the visit: the assessment section of the health visit form, and the dated problem list and/or behavioral health section.

DEPENDENT VARIABLE: SCREENED COHORT

We reviewed SDQ results, which were included in the medical chart. The primary dependent variable was a social-emotional problem on either youth or foster parent SDQ, as indicated by a score greater than the 90th percentile in any of the problem domains.[16] Using either youth or parent report for identifying problems yields the greatest likelihood of identifying potential social-emotional problems.[23] We used nominal categorizations to record the presence of a strength and/or difficulty in any 1 of the 5 domains, as determined by SDQ cutoff scores for clinical significance. Parent and youth scores were analyzed in combination when both were available.

We categorized SDQ scores as indicating the presence of a potential social-emotional problem (clinically significant range on SDQ) or absence of a social-emotional problem (borderline or average range on SDQ). We recorded the frequency of SDQ-identified problems on the basis of a clinically significant score in any domain.

RELIABILITY

Two coders were selected and trained to conduct the chart reviews. To evaluate interrater reliability, 10% of the charts were reviewed by both coders. When reviewing the same charts, both coders found similar outcome data more than 90% of the time. All data were independently double-entered and verified for consistency.