Mental Health Screening Outcomes in a Pediatric Specialty Care Setting

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Objective To evaluate whether a psychosocial screening program that included free and flexible access to mental health (MH) consultation resulted in increased rate of consultations.

Study design This is a post hoc review of a clinical screening program in a pediatric food allergy clinic in New York City. Screening was limited to 2 days per week, providing an opportunity to compare screened and nonscreened cohorts. Previous results from more than 1000 other families were analyzed to create the 1-page screening questionnaire. Participants were children with allergies and their parents who sought care at the clinic between March and September 2013. Parents were screened for distress and quality of life burden related to their child's allergy, and children were screened for anxiety, bullying, and quality of life. The predefined primary outcome was the percentage of families who received the free MH consultation after screening vs no-screening days in the allergy clinic.

Results The 3143 encounters during the study period included 1171 on screening days and 1972 on no-screening days. Most (86%) eligible families completed the screen. Almost one-half (44%) met the initial screening thresholds. A total of 71 families (6.1% of screening days encounters) were referred to a MH consultation after a secondary review, but only 11 (1% of screening days encounters) scheduled a MH appointment. Eighteen families from the no-screening days came to a MH evaluation (1% of no-screening days encounters).

Conclusion Screening did not lead to enhanced MH follow-up. Resources may be better used on ensuring the availability of MH care rather than on screening in pediatric specialty clinics. *(J Pediatr 2016;168:193-7)*.

Screening for mental health (MH) disorders (especially depression) has been recommended by societies such as the US Preventive Services Task Force (USPSTF).[1] The USPSTF also recommends screening in adolescents,[2] while acknowledging the lack of controlled studies showing that screening improves MH or other outcomes in children or adolescents; results in adults are mixed.[3] In the absence of proof that screening improves outcomes, the justification for MH screening in children or adolescents relies on several factors. First, screening is relatively easy and noninvasive (typically answering a questionnaire or a few questions). Second, screening for MH disorders is expected to lead to identification of cases that would not have been known otherwise. Third, depression, anxiety, and other MH disorders have effective treatment options that presumably can be deployed in the appropriate setting.

A unique characteristic of MH disorders is that the notion of "normal" vs "disordered" feelings is strongly dependent on the context in which they are experienced. For example, the interpretation of the distress and hopelessness experienced by a patient after myocardial infarction should be different from the interpretation of the same symptoms in the absence of a stressor.[4] Moreover, patients who do not self-identify as "MH patients" may be singularly unmotivated to seek follow-up MH care. Thus, patients who have been identified by screening may not require referral, may not self-identify as having an MH "issue," and may not seek further care.

Here we report the results of a pediatric psychosocial screening effort in a controlled but naturalistic setting, which minimized selection bias. Screening was conducted in a pediatric food allergy clinic, under the aegis of the Enhancing, Managing, and Promoting Well-Being and Resiliency (EMPOWER) program, a philanthropically funded effort at the Jaffe Food Allergy Institute at the Mount Sinai Medical Center in New York.[5] Screening was offered only on 2 clinic days in the week (because of funding constraints), creating a naturalistic "controlled" situation in which some of the patients received the screening and some did not. If a need was identified, then an MH consult was offered free of charge and with flexible scheduling to all referred patients regardless if they were seen on a screening day or not, thereby eliminating barriers to access. We sought to determine whether significantly more patients from the screening days than from the no-screening days came to the MH evaluation.

ACC	American College of Cardiology
EMPOWER	Enhancing, Managing, and Promoting Well-Being and Resiliency
MH	Mental health
QoL	Quality of life
USPSTF	US Preventive Services Task Force

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Methods

The Icahn School of Medicine's Institutional Review Board approved as exempt the post hoc analyses for the purpose of this study. Patients and their parents who were seen in the clinic on Tuesdays and Thursdays from March through June and on Wednesdays and Thursdays from July through September were given the screening questionnaire. Those seen on other days were not screened. The same physicians participated in clinics on screening and no-screening days, and the staffing and place of service were identical on both types of days. This report presents the screening results for the period March 26, 2013, through September 19, 2013.

Screening consisted of 2 stages. All parents and all children aged ≥8 years were given the paper questionnaire on arrival at the clinic when the staff member (a psychology extern) was present. The completed questionnaire was immediately reviewed by the extern, who then approached all of the screen-positive families and some other families (see detailed criteria below) to discuss and review the results. This encounter was brief and did not include an actual MH intervention. Following this review, a referral was made if needed. The extern approached patients and families under the following circumstances: (1) the parent or child had an "above threshold" score on any of the screen components (described below); (2) the parent or child wished to discuss the questionnaire results (regardless of the score); (3) the physician requested a review (regardless of the score); and (4) for any other clinical reason. If it appeared that further evaluation might be indicated, the parents were given the EMPOWER program coordinator's phone number and asked to schedule a meeting for further evaluation (free of charge) with a child psychiatrist.

Physicians were free to separately refer patients or parents for an evaluation regardless of whether or not they were screened. Patients and parents also could "self-refer" (ie, contact the coordinator even if they were not referred) and schedule an appointment. The program was restricted to patients of the Jaffe Food Allergy Institute and their parents.

Families who were referred for evaluation after the screening but did not make an appointment to see the psychiatrist within 2 months were called once and reminded (either directly or through a phone message) that the evaluation was available free of charge. If the family was successfully contacted, a parent was asked about the reason for not scheduling the appointment.

Referral for the more extensive evaluation was facilitated by the program coordinator with a dedicated phone line and e-mail address. The evaluations were done on any weekday. Many of the patients scheduled a visit concurrent with a clinic visit with an allergist. Substantial efforts were made to accommodate patient and parent needs, and an interpreter was made available as needed. The evaluation was free to the patient/parent and was not billed to insurance carriers. The evaluation, which took approximately 1 hour, followed the recommendations of the American Academy of Child and Adolescent Psychiatry[6] and resulted in a tentative diagnosis and action plan. The evaluation did not include any specific instruments or questionnaires. If further evaluation or treatment was recommended, patients were referred to another practitioner or were treated by EMPOWER program providers.

Paper Screen

Development of the Paper Screen. The EMPOWER program is described elsewhere.[5] The screen was developed in several stages. Findings from a "needs assessment" national study[7] led to the development of a questionnaire packet. This packet included items evaluating quality of life (QoL) constructs, patient and parent anxiety (with parents reporting on their own anxiety and the child's anxiety), self-care responsibilities, bullying/teasing, and demographic and illness severity parameters. This questionnaire packet was then administered to a sample of clinic patients/parents, as described elsewhere.[5,8]

The results were analyzed as follows. First, constructs were identified that related to a substantial decrease in QoL. Those constructs were incorporated into the new screen. Second, QoL questionnaire results were analyzed by each factor to create a shorter version, which was incorporated as well. The resulting 1-page questionnaire was reviewed in 2 stages. A group of 2 parents, an allergist, a psychiatrist, a psychologist, and 2 research assistants reviewed the content and clarity and revised the questionnaire accordingly. The questionnaire then was sent to a group of 30 parent-leaders of a patient advocacy group, who also provided detailed comments.[5] This process ensured substantial stakeholder involvement in the development of the tool, as previously recommended.[9]

Measures. The paper screening questionnaire consisted of a parent form and a child form (**Appendix**; available at www.jpeds.com). The child form was completed only if the patient was aged ≥8 years; otherwise, only the parent form was used. The parent form included 2 questions inquiring about bullying and 5 questions (from the factor analysis of previous results) from the Food Allergy Quality of Life–Parental Burden,[10] as well as the Impact of Event Scale 6.[11] Thus, the constructs targeted in the parent form included responsibility for self-care, bullying, parents' QoL, and the parents' own distress as related to the child's allergy.

The child form consisted of 3 comparable allocations of medical responsibility questions, 2 questions inquiring about bullying, 2 subsections of the Pediatric Quality of Life Inventory[12,13] (the social and school domains), and 9 questions from the Screen for Child Anxiety-Related Emotional Disorders.[14] Thus, the constructs targeted on the child's form included responsibility for self-care, bullying, child health-related QoL, and child's distress.

Analyses of data from previous cohorts of our target population[5] were conducted to determine cutoff scores for the Screen for Child Anxiety-Related Emotional Disorders, pediatric and adult QoL measures, and Impact of Event Scale 6 that captured the top 10% of our patient population. Any above-threshold score on those items triggered a secondary