Screening for Developmental Disabilities

Early identification and treatment of developmental disabilities that cause school-related problems is of considerable importance to practicing pediatricians. The motivation for early identification programs is: (1) to identify the barriers to children's participation in the educational process, (2) to assist these children and their families in finding medical, educational, or other appropriate services, and (3) to overcome or mitigate the adverse effects of the disability.

The need for visual and auditory examinations to identify deficits in these areas is readily accepted. Use of these examinations is standard practice. However, use of preschool examinations for developmental problems, potential learning disabilities, and mental retardation needs to be encouraged. These disorders, which may be less obvious, may have a major impact on the physical and mental health of children and their families.

Screening identifies most children who have or who are at risk of having developmental disabilities. Pediatricians have the opportunity to incorporate screening examinations in the context of well-child care and to refer their patients for confirmatory testing by an appropriate consultant, if indicated.

The conduct of a scheduled health evaluation, as described in Academy guidelines, includes a systematic evaluation of development at all ages, commencing in the perinatal period. Simple instruments that identify developmental problems are readily available. These tests assure early identification of a range of developmental disabilities.

Specific safeguards, including carefully developed guidelines and procedures, should accompany the application of such screening tests when practiced as part of a large community-based program, as well as in the pediatrician's office. Participation by pediatricians in the development and implementation of these screening procedures will assure that such efforts are comprehensive and effective. In addition, pediatricians should be direct participants in these screening programs.

RECOMMENDED GUIDELINES

Guidelines for the conduct of screening programs on a community basis are as follows:

1. Screening for developmental disabilities or potential causes of educational failure should be conducted in an organized and systematic manner, with school board approval and the cooperation of parents, interested physicians, and appropriate community agencies. All school screening procedures should be in compliance with Public Law 94-142 (The Education for All Handicapped Children Act of 1975) and section 504 regulations.

2. All children attending school should be examined for developmental disabilities, preferably by their own pediatrician, before the time of registration or entrance to school. If a child has been attending school and, after a period of adaptation, is experiencing failure, a prompt evaluation is indicated.

3. Examinations or screening for disabilities should be integrated with other aspects of children's health care and with overall school health programs.

4. Screening programs and examinations for potential medically related causes of academic difficulties do not replace the need for regular periodic health examinations and, optimally, should be part of those examinations.

5. When screening programs for developmental disabilities use screeners other than physicians to administer tests, such personnel should be trained and supervised by certified professionals.

6. When a screening examination results in the suspicion of a developmental disability, the child should subsequently receive a more comprehensive evaluation by a pediatrician and other professionals to confirm the presence of this disability and its degree and significance.

7. Results of academic screening procedures and any accompanying recommendations for a definitive or comprehensive evaluation of a child with a suspected developmental disability should
promptly be made available to the child's pediatrician or other regular "medical home." The pediatrician should help arrange for confirmatory tests and appropriate pediatric developmental examinations and for the interpretation of test results to the family in a nonthreatening environment. For families that do not have proper medical resources available, the school may arrange for such a referral, optimally to a pediatrician familiar with the problems of developmentally disabled children. Findings of such examinations, their interpretation, and possible implications should be forwarded, with appropriate parental permission, to the authorized persons at the child's school.

8. After all evaluations are completed and the child is placed in an appropriate educational program, the pediatrician should seek a report of the child's actual school and behavioral performance at regular intervals. Such reports are useful in monitoring whether medical interventions, including the use of medication, are necessary. Reports of the child's progress should be provided to the parents and the child's physician.

9. Both the child's pediatrician and the appropriate school personnel should be made aware of arrangements for the follow-up and reevaluation of the affected child, because these arrangements frequently involve medical as well as educational interventions.

**SELECTION AND ADMINISTRATION OF TESTS**

Although an increasing number of states require screening for disabilities at the time of school entry, most school districts are not required by law to screen for various developmental problems. Therefore, a child may matriculate for 1 to 3 years (or more in some instances) before such a problem is identified. Pediatricians, by using appropriate developmental instruments as part of a preschool examination, can often prevent this oversight.

When mass scholastic screening programs are used, they are frequently of local origin and may lack proper validation, standardization, and normative values, particularly in some of the situations in which they are being used. Many times, these tests are administered by untrained personnel.

Blackman et al found that sophisticated screening instruments "require a high level of expertise and supervision," and, when pediatricians did not have sufficient time to perform the screening procedures, they trained nurse practitioners who functioned effectively in the performance of screening programs for preschool- and school-aged children.

The application of unstandardized tests to heterogeneous populations can result in overidentification, a traumatizing and expensive result. The use of screening tests should not result in labeling of children but rather should lead to more definitive and comprehensive assessments. Pediatricians must be aware that there are inherent dangers in classification and labeling per se. As stressed by Frankenburg and Camp, "screening should not harm the individual being screened." It is, therefore, imperative that schools avoid poorly conceived screening programs that do not use standardized and validated instruments. Prototype model programs should be developed. Methods and procedures should be tested in various communities and should be subjected to review on a regular basis by a committee of parents and experienced professionals. This is particularly important because no one screening instrument can be universally applied.

There are, however, numerous instruments in use that have been widely tested. The benefits and shortcomings of many such tests have been analyzed in several publications. Some promising new instruments have also been field tested and validated for varied populations. Any instrument selected for use in a specific school district should be carefully tested before its use is more widely applied.

**FOLLOW-UP PROCEDURES**

For administrative purposes, children who are screened for developmental disabilities can be grouped in three categories: (1) pass, (2) need follow-up, or (3) need comprehensive assessment. A continuing, ongoing relationship between the screening staff, parents, the child's pediatrician, and school and local health authorities should guarantee needed follow-up for children who may require special services. Examiners can facilitate follow-up and treatment by assuming an advocacy role for children determined to be at risk. For children with definite disabilities, as specified by law (PL 94–142), complete initial and follow-up examinations are necessary. In addition, remediation programs must be available and easily accessible to children who have special needs. These children should be reevaluated after special help has been provided.

**CONCLUSIONS**

Developmental screening is a technique that attempts to detect those children who may be in need of more comprehensive evaluations. Such evaluations may lead to the development of an individual educational program or interdisciplinary comprehensive plan of remediation for a child with a disability, to a realization that there is no signifi-
cant problem or to a decision that further observation is warranted. Before school screening instruments are applied in community-wide screening efforts to detect developmental disabilities, particularly learning disabilities, it is essential that the selected instruments are most accurate for specific populations and that the tests be administered and interpreted by properly trained and supervised personnel. When, as often is the case, such screening is not available on a community-wide basis, the pediatrician’s role in screening for developmental and school-related problems is all the more important.

Early screening examinations should never be used to exclude children from needed services, but findings should determine those children who may need further evaluation and, subsequently, remediation. Failure to identify and treat developmental disability may have a lifelong impact on the child’s health and well-being. There may also be a considerable negative impact on the family. The immediate objective is to get the assistance the children need to enable them, whenever possible, to be served within the mainstream of education.

Finally, for early identification and intervention programs to be effective, it is necessary that these programs be coordinated by both health and education professionals so that children with developmental disabilities are provided the means to overcome or mitigate the adverse effects of these disabilities.

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