If we as occupational therapists are to provide effective care in the changing early intervention system, we must meet a new challenge. This challenge is to collaborate with other professionals to develop community-based comprehensive care for children and their families (Shelton, Jeppson, & Johnson, 1987). Occupational therapy's traditional service approach, which centers on the child rather than on the family unit, no longer meets consumers' needs. Therefore, we must rethink how we will provide services for infants and toddlers with special needs to meet family needs and legislative mandates.

The Education of the Handicapped Act Amendments of 1986 (Public Law 99-457) emphasizes a joint effort by consumers, advocates, and professionals to provide children, immediately at birth or on recognition of the child's delayed development, with early intervention services (Hanft, 1988). Public Law 99-457 also identifies the family as the focal point for services and requires a statewide interagency system of health, social, and educational services to address the needs of both the child and the family. Establishment of an occupational therapy specialty area in early intervention presents the profession with many important policy and practice issues.

Understanding Early Intervention

Early intervention includes a wide range of health, social, and educational services for families with children from birth through 3 years of age who are developmentally delayed or at risk for developing delays. Occupational therapy for the young child addresses "the functional needs of the infant related to the performance of self-help skills, adaptive behavior and play, and sensory, motor, and postural development" (American Occupational Therapy Association [AOTA], 1988a). An infant's need for services so early in life often indicates serious neurological and other health problems that interfere with functioning in daily feeding, sleeping, and movement routines. Occupational therapy services, therefore, must be designed to help families and other caregivers improve the child's functioning in the home and in the community. These services should include (a) adaptation of the environment, (b) support for parental roles and responsibilities, (c) advocacy for the child and family, (d) referrals to other resources, and (e) consultation with community agencies.

Early intervention services are provided in the home, child care site, center-based program, or at any combination of these settings. Services for infants and their families traditionally were located in hospitals and clinics but now are often provided in public and private schools, private nonprofit community agencies, child care settings, and parent-sponsored organizations. This relocation of services signals the trend in health care over the past 10 years toward community-based services. Even within hospitals, medical and technological advances have revolutionized neonatal care, thus creating neonatal intensive care units, which have become specialized areas of practice.

Implications for Occupational Therapy Education

The advent of neonatal intensive care units raises questions about early intervention as a specialized area of practice for occupational therapists. Is early intervention a specialty within a broader specialization of pediatrics? If so, are there specialized areas of practice within early intervention, such as working in a neonatal intensive care unit? I believe the answer is yes to both questions.

Effective programs for infants must recognize that basic functions developed during infancy lay the foundation for future self-help, motor, and play skills and adaptive behavior. An understanding of and respect for family systems and values are also essential (Anderson & Hinojosa, 1984; Bailey & Simeonsson, 1984; Dunst, Trivette, & Deal, 1988; Zeitlin & Wil-
The occupational therapist must understand the ages and stages of development throughout childhood in relation to each child's unique environment—his or her family. A generalized pediatric specialty, then, becomes the basis for practice in early intervention.

Such a general knowledge of pediatrics, however, can serve only as the foundation for developing specialized early intervention skills. Occupational therapists must understand the specific and complex needs of infants and toddlers and their families. For example, the knowledge necessary to help new parents set up a feeding routine for their premature infant who lacks any organized suck-or-swallow responses is quite different from what is needed to help a preschool teacher encourage a 4-year-old boy with Down syndrome to chew foods of different textures.

Degree programs in occupational therapy provide an entry level education in human development and behavior throughout the life cycle, including sensorimotor, cognitive, and psychosocial components. There currently are 89 entry level programs nationwide that offer professional training in occupational therapy at either the graduate or the undergraduate level. Nine additional programs offer an advanced specialization in various areas of pediatrics. All of these programs include some pediatric training in their human development and behavior courses (AOTA, 1988a), but typically offer only minimal specialized training in working with infants and their families (Hanft & Humphry, 1989). Because knowledge of early growth and development and family-infant programming has expanded in the last 10 years, the ability of entry level programs to incorporate this material into their curricula varies across the country.

It is unrealistic to expect that basic occupational therapy education programs could prepare students to assume the specialized roles required in early intervention. The profession, however, must continue its analysis of service trends and prepare clinicians, educators, and researchers for meeting the needs of consumers in new specialty areas. The following recommendations apply to all education programs that prepare personnel to work in early intervention. They also provide important guidelines for occupational therapy training.

- Service providers who work with infants and toddlers with special needs and their families require specialized information and skills.
- The focus of intervention for children from birth to age 3 years should include the primary caregiver(s), who are usually the parents and other family members.
- Intervention with infants and toddlers and their families requires maturity and judgment gained by exposure to different points of view. Therefore, training programs should offer substantial opportunities for gaining practical experience.
- Interdisciplinary and interagency training is essential, because early intervention services require the coordination of many disciplines and agencies (Brecker, 1984).

Implications for Practice

In providing family-centered, rather than child-centered, care, occupational therapists must reconsider to whom and how they provide services. Occupational therapists have traditionally worked with families as an important adjunct to the child's treatment (Brugnate, 1949; Poncher & Richmond, 1947; Tyler & Chandler, 1978). Since the early 1980s, however, collaboration with families and other caregivers has become a primary aspect of pediatric occupational therapy services (Anderson & Hinojosa, 1984; AOTA, 1989; Burke, Clark, Hamilton-Dodd, & Kawamoto, 1987; Case-Smith, 1989; Day, 1982; Friedman, 1982). This places an increasing emphasis on two roles for occupational therapists: consultant and case manager. Acceptance of these roles, however, does not mean that occupational therapists must (a) stop providing hands-on therapy, (b) become family counselors, or (c) provide services only to parents. Instead, occupational therapists must maintain and enhance their child skills as well as develop new competencies in collaborating with families.

The Occupational Therapist as Consultant

Consultative services should recognize the central role of the family in facilitating the child's development. These will then become an important way to meet the mandate of providing family-centered care. In addition, early intervention programs will emphasize consultative occupational therapy services in response to personnel shortages (Meisels, Harbin, Modighan, & Olsen, 1988).

Family-centered care can be provided in the form of either consultation or direct service. Direct, or hands-on, therapy for the very young child can be family-centered if the therapist uses his or her experiences in working with the child to help the child help the child's cues, reinterpret behavior, and interact with the child in a more meaningful way. It may also mean that the occupational therapist focuses his or her treatment sessions with the child on developing feeding skills, because that is a topic of particular interest to the parents. Services that are truly family-centered may not always reflect the therapist's priorities for the child (Dunst et al., 1988).

Direct service, however, should always be provided in collaboration with family members and other care providers, such as child-care workers, teachers, and physicians. Direct service that is provided as a collaborative effort acknowledges the therapist and caregiver(s) as equal partners. Pairing collaborative consultation with direct service aims to transfer the knowledge that the therapist has gained from working with the child to the parents to help them adapt therapeutic suggestions in the home and elsewhere. A statement such as "Here's the best way to help Ryan put his shirt on," does not individualize treatment recommendations for the family. The parents have their own work schedule and often must help other children off to school or to a child care provider in the morning. In addition, the parents must set their own priorities for helping their child gain independence. A collaborative partnership is better reflected in the statement,
"I've found this is an easy way to help Ryan put his shirt on. How would this work for you?" Such a statement gives the parents a chance to react to the therapist's suggestion and define their own parameters and needs. It is the therapist's responsibility to refine his or her suggestions to meet the parent's needs. Effective collaboration with families allows them a choice in service options as well as in how involved to become in implementing them.

The Occupational Therapist as Case Manager

Public Law 99-457 mandates that a case manager be appointed to work with each family. This case manager is responsible for coordinating and implementing the family's service plan. The role of the case manager incorporates many of the same skills that are needed for effective consultation (i.e., communication, coordination, referral, and advocacy). One of the most important functions a case manager can provide is to help families with the transitions they face in finding services, securing funding for these services, and adapting their family life to meet the special needs of one of their members (AOTA, 1989). To be effective case managers and consultants, occupational therapists must support families through these transitions. Each family has its own values, needs, and resources related to child care and family life. To assist families with identifying and prioritizing needs, seeking information, and locating resources, the case manager must have a profound respect for different cultures, values, and child-rearing practices.

Specialty Preparation

Dunn and Rask (1989) stated that the profession must clearly define entry level practice for the new graduate and suggested Bajnik's (1988) model for categorizing educational experiences. Bajnik distinguished between core, specialized, and advanced skills. For an analysis of early intervention as a specialty area in occupational therapy, see Table 1.

Core skills reflect knowledge of typical and atypical development throughout childhood and adolescence. Specialized skills are based on knowledge specific to infancy and family dynamics. Advanced skills reflect the additional training needed to function in complex early intervention settings such as the neonatal intensive care unit. These practice levels represent a hierarchy of skill development. Core skills in general pediatrics are prerequisites to specialization skills in infancy, which in turn are necessary to apply advanced treatment modalities. This progression of skill development can serve as a guide for both new occupational therapy graduates and practicing clinicians who want to work in a different specialty area.

Future Issues

In highlighting the need for coordinated family-centered services, Public Law 99-457 fostered a national discussion among those professions that serve infants and their families (Bradt & Magyary, 1989; McCollum & Thorp, 1988). Occupational therapy initiated its own formal deliberations in 1986 via two important events. The first was an invitational symposium held in Boston to identify future service needs and to recommend strategies for the development of effective pediatric practice (Henderson, Lawlor, & Pehoski, 1987). The second was the creation of an early childhood intervention task force, which recently published detailed guidelines (AOTA, 1989).

Furthermore, in 1988, four surveys were conducted to determine the state of the art in pediatric and early intervention education and practice. The American Journal of Occupational Therapy, see Table 1.

Table 1
Three Practice Levels in Early Intervention by Content Area, Role Application, and Source of Training

<table>
<thead>
<tr>
<th>Practice Levels</th>
<th>Core Skills</th>
<th>Specialized Skills</th>
<th>Advanced Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>Typical and atypical child development (aged 0-18 years)</td>
<td>Typical and atypical infant development (aged 0-3 years)</td>
<td>Intensive care nurseries</td>
</tr>
<tr>
<td></td>
<td>Occupational therapy pediatric theory and modalities</td>
<td>Family dynamics</td>
<td>Advanced modalities (e.g., NOT for infants)</td>
</tr>
<tr>
<td>Role application</td>
<td>Direct service provider for children (aged 4-18 years)</td>
<td>Consultant Direct service provider for children (aged 0-3 years)</td>
<td>Case manager Program consultant</td>
</tr>
<tr>
<td>Source of training</td>
<td>Entry level occupational therapy program Pediatric affiliation</td>
<td>Advanced master's degree Continuing education</td>
<td>Mentor Specialty certification (e.g., Brazelton)</td>
</tr>
</tbody>
</table>

Note. NDT = neurodevelopmental treatment.
early intervention, including the unique roles and functions of occupational therapists and certified occupational therapy assistants.

- The provision of family-centered occupational therapy services that recognize and respect diverse ethnic, cultural, and racial values and beliefs.
- The identification of up-to-date assessment and intervention practices that will help occupational therapists identify and meet the needs of children and their families.
- The development of continuing education options that will enable practitioners to develop specialized and advanced skills in early intervention, including those skills needed for effective consultation and case management.

In conclusion, the occupational therapy profession has begun a process of deliberation that is commendable for its timeliness and breadth of issues considered. The American Occupational Therapy Association is receiving national attention for its early intervention guidelines and continuing education programs planned for 1990. We have sufficient data on education and clinical practice in pediatrics and early intervention to begin defining a pediatric specialty as well as to refine our role in providing services to infants with special needs and their families.

References


