To understand the rehabilitation needs of a developing country, one must undertake a culturally sensitive assessment. Such assessments often reveal that biomedically oriented occupational therapy services do not best meet the needs of all countries or regions. This paper examines how occupational therapists can assist in the development of occupational therapy services in the third world and introduces a number of specific strategies to guide that development once assessment has been completed.

Although the diversity and cultural contexts of rehabilitation needs are generally acknowledged by rehabilitation professionals, occupational therapy consultants tend to export service models to third world countries that are similar to those used in developed countries. I believe this happens for two reasons. The first reason relates to the way that services develop and consultation occurs. Usually occupational therapy experts fly into a country on a whirlwind tour and then return home to write their recommendations in the comfort of their air-conditioned offices. Many of these experts write their reports without giving themselves sufficient time to understand the country or its needs. The second reason is that many of those in the third world who are responsible for assessing their countries' needs and developing rehabilitation services want the same service model available in developed countries. These government officials and highly placed administrators who have access to literature and conferences and take field trips to developed countries have been exposed to the rehabilitation team concept practiced in developed countries. This includes specialized services that focus largely on reactive treatment rather than prevention. So it is not surprising that these health care planners come to see the biomedical model with its specialized services for all as the ideal model for their own countries' rehabilitation services. Nor is it surprising that many outside consultants feel pressure from these health care planners to recommend the biomedical model, even though the consultants' own data suggest that such specialized services are neither affordable nor appropriate to the health care situation in that country or region.

This situation produces an ethical dilemma for occupational therapy consultants. After all, is it fair for consultants to recommend alternatives that many of us would consider second-class services? Would not all of us rather take our children to a developmental disorders specialist working in a teaching hospital than to a health volunteer in a community clinic? Yet is it ethical to encourage the development of specialty rehabilitation services that will likely only reach a privileged few rather than the majority of those in need?

Culturally Sensitive Assessment

Because of this dilemma, the best approach is for occupational therapy consultants to conduct a culturally sensitive assessment of the need for occupational therapy services in the particular country or region in which they are working. Three key areas must be considered in such an assessment: (a) the patterns of morbidity and mortality, (b) the patterns of health care service distribution, and (c) the potential to sustain occupational therapy services over the long term.

Mortality and Morbidity

A culturally sensitive assessment must consider the country or region in terms of infectious diseases, the causes of infant and adult mortality, and the incidence of chronic conditions. In many developing countries, widespread public health measures, expanded vaccination programs, and improved agricultural productivity have shifted the pattern of mortality and morbidity. Infectious and epidemic diseases that had been major killers, especially of children under 5 years of age, have been reduced, whereas cancer and cardiovascular illness in the older population have become more common. This is not unlike the patterns of many developed countries. It is usually not until regions have control of infectious diseases that disability and chronic conditions become visible and the need for rehabilitation services becomes apparent.

World Health Organization publications provide excellent sources for investigating the mortality and morbidity picture of different countries and regions. So does The State of the World's Children (Grant, 1991), which is published annually by Oxford University. This publication provides comparative...
statistical statistics on infant mortality rates, adult literacy, and other related topics. It is important to also investigate a country's primary health care system, including the number of health posts or outreach clinics, to get an indication of the priority the country places on basic health care.

A needs assessment often involves numerous meetings with different ministries so that the consultant can learn the country's specific terminology and understand complex levels of bureaucracy. Charts and tables showing the incidence of specific diseases must be deciphered. It is also important to identify regional differences in quality and quantity of services, because some areas may be in greater need of rehabilitation aid than others. This is especially true in areas of civil war. Despite the difficulties that are involved, consultants should spend as much time learning about the country's general health care system and the health status of the population as they do planning what services are needed.

Patterns of Health Care Distribution

The second part of a culturally sensitive assessment is to evaluate the patterns of health care resource distribution. This requires that the consultant get away from any showpiece services that may be available in the city's center and go into rural or urban slum areas where the need is greatest. Often the first places consultants see are the modern, well-equipped rehabilitation centers funded by Rotary International or the Lion's Club. In most countries, these services are in large urban areas. Although such centers provide important services and clearly bring about much-needed publicity and community awareness to persons with disabilities, they rarely represent typical rehabilitation services. Visiting rural health posts and small general hospitals can provide the consultant with a more balanced picture of services.

Ability to Sustain the Profession

The third component of a culturally sensitive assessment is to determine whether the country can sustain occupational therapy services. The ability to sustain the profession is determined by (a) the need for occupational therapy services compared with and in relation to other health services, (b) the availability of an appropriate government infrastructure, and (c) the ability to create realistic employment opportunities.

The assessment of the need for occupational therapy in the overall health care scheme is critical, because other services are often needed more. If infectious diseases are not controlled, potable water not available, and malnutrition widespread, neither the government nor community members will understand the need for occupational therapy services. For example, nutritional disabilities that are common in the urban slums, or favelas, of Latin America have created the need for sensory stimulation programs for persons with developmental delays. But perhaps even more important is the need to prevent these disabilities through supplementary nutritional programs.

We must identify whether the country has the government infrastructure in place to sustain occupational therapy services. Infrastructure refers to government departments related to rehabilitation services, which usually include ministries of health, education, employment, and social welfare. Infrastructure also includes any government agency that deals with training health care professionals and any central agency that is responsible for the country's overall planning. In Indonesia, for example, the national ministry known as BAPANAS reviews and coordinates all policies and programs. For the development of occupational therapy services to be taken seriously—that is, funded—all relevant government agencies must identify occupational therapy services as a priority. Policies need to be in place that will support the development of occupational therapy services. Although external aid agencies may supply initial funding, internal funding is necessary to sustain the profession.

The third point to consider is whether the development of occupational therapy services will create realistic employment opportunities among the country's population. These opportunities will need to financially compensate the person and his or her family for the 3 to 4 years of education required to become an occupational therapist. Realistic employment opportunities are particularly important in many developing countries where government hospitals and clinics pay low wages, and health care workers must supplement their incomes through private practice.

In many Asian countries, for example, occupational therapists work from 7 a.m. to 2 p.m. in a government facility and then from 5 p.m. to 8 p.m. in private practice out of their homes or on a home-visit basis.

Those occupational therapists who develop private practices face fierce competition with other professionals for the same private practice dollars. They also must compete with traditional healers such as herbalists, who are active in the health care market.

The connection between job opportunities and the ability to sustain the profession can be understood from the perspective of a family with limited financial resources who is planning the career of a son or daughter interested in health care. The family is much more likely to encourage a career in medicine or physiotherapy than occupational therapy because the former are better recognized and more lucrative careers in most developing countries. Thus, one of the critical issues in the development of occupational therapy services is how to educate people for jobs that do not currently exist and are not likely to develop in the near future.

Strategies to Aid the Development of Occupational Therapy

Several strategies can potentially aid the natural development of occupational therapy in countries with few resources. The term natural is used here to mean culturally appropriate, both in the pace of development and in the shape that development takes. These strategies include (a) documenting the extent of disability, (b) participating in or encouraging the development of a comprehensive plan for rehabilitation services, (c) identifying focal points or high-priority needs, and (d) developing appropriate educational models.

Documenting the Extent of the Disability

The first step toward development of rehabilitation services is the identifica-
tion of the magnitude and nature of the country's rehabilitation needs. It is clear from the experiences of developed countries that statistical proof of the need for service is the basis for most service development. Few developing countries have the resources to undertake an incidence and prevalence study of persons with disabilities or to gather evidence of those at risk for disability. This type of research is an extravagance when basic health is an issue. Thus the consultant should not only recommend that such data be gathered, but also assist, if necessary, in locating funding for such a study. The consultant can also help plan the study. For example, he or she can work with the country's bureau of statistics to develop items about disability that can be included in the national census or special health surveys. Several tools are available that have already been field tested, which can help with documentation (see Helander, Mendis, Nelson, & Goerdt, 1989; Zaman et al., 1990).

Consumer action can also help spur the development of services. In North America, one of the best ways to attract interest to an area of need is through consumer action, the Gray Panthers and advocates for the independent living movement have proven this. In some third world countries, the concept of consumer pressure may be somewhat premature; many potential consumers are not even aware that help exists for "their daughter who has fits" or "the old one who can no longer feed himself rice." In addition, high-profile consumer advocacy may be incompatible with the sociopolitical situations in some countries. However, consideration of consumer-identified need and the encouragement of consumer empowerment are important steps in the long-term planning of services.

Encouraging Development of a Comprehensive Rehabilitation Plan

A consultant's second strategy should be to encourage the development of a comprehensive plan for rehabilitation. The emphasis here is on rehabilitation rather than on occupational therapy. It is critical that the focus be on the needs of persons with disabilities, their caregivers, and those at risk for disability, rather than the need for a particular service or profession. I think we can assume that in most of the third world, some of those needs will be addressed by services that occupational therapists typically provide. However, it would be ethnocentric to assume that a profession called occupational therapy must be patterned after a North American model or that it could be developed without an assessment of the larger rehabilitation picture.

A key step in the development of such a plan is to understand the place of rehabilitation within the development priorities of the country or region. Evaluating the priority of health care in relation to economic development, literacy, and food security, for example, is important. We need to be alert to the obvious links between rehabilitation and larger international development issues. For example, in India, the equality and empowerment of women is a top priority, so conceptualizing women as caregivers of persons with disabilities fits within this priority. Emphasis on this connection might increase the priority of rehabilitation within the health care plan. Environmental issues are also important in many developing countries. An example is the issue of deforestation for cooking fuel. The prevention of visual and respiratory disorders that are contracted through the use of wood-burning stoves can be linked to the priority of environmental protection.

The development of a comprehensive plan for rehabilitation could also include (a) mapping out the roles of various professionals and the ways occupational therapists might cooperate with them, (b) suggesting ways of developing curricula and clinical fieldwork, (c) identifying potential employment in both government and private practice, and (d) exploring ways of translating educational material about rehabilitation for health care professionals of other cultures. Any rehabilitation plan needs the input of persons with disabilities and their families. Consultants can be instrumental in advocating that persons with disabilities and their family members be included in the rehabilitation plan process.

Consultants involved in the development of a rehabilitation plan should recognize the role that can be played by large multilateral aid agencies, such as the World Health Organization, the United Nations Children's Fund, and the United Nations Development Programme. It is important to understand the position of aid agencies in the health care scheme, because new programs are often established through the matched funds of aid agencies and local governments.

Prioritizing Needs

The third strategy in planning occupational therapy services is the identification of those areas in which rehabilitation practitioners can most quickly and obviously have an effect. The plans can then be shaped with these areas having the highest priority. This is a pragmatic approach. By identifying the area of greatest need with the least help available, it is easier to prove that services are needed. In Brazil, for example, an effort is underway to increase the profile of occupational therapy within universities as well as the health care system. One university has chosen to focus specifically on pediatrics and gerontology because of the high incidence of malnutrition-related disabilities among the country's children and because so few services are available for the country's elderly population. Services for women and children who have been disabled directly or indirectly in war zones may also be considered a high priority soon (Groce, 1991). This is not to say that other areas are not important, but rather, that planners can pattern the development of other aspects of the profession on these priority areas.

A high priority in most third world countries is the prevention of disability. This reflects one of the biggest cultural differences between developed and developing countries in occupational therapy. Although there has been a recent revitalization of the prevention area in many developed countries, it is not a major area of activity for most occupational therapists. Few of us are even fortunate enough to have taken a course on prevention during our initial education. However, prevention has long been recognized by aid agencies as the most effective approach to disability. Dietary supplementation, vaccination, and early detection and screening programs are effective preventive approaches to disability that must be acknowledged when considering the potential role of occupational therapists in the developing world.
Developing Educational Models

Occupational therapy consultants working in developing countries must be prepared to consider a variety of educational models for rehabilitation professionals and paraprofessionals. Consultants frequently recommend that the country's base of health care providers be expanded. Yet, in many of these places, no occupational therapy education programs exist, so students are often sent to other countries to study. This is known as the train-the-trainer approach, because the intention is for students to return to own their regions or countries and begin education programs based on what they have been taught. One of the limitations of this approach, however, is that most trainers return to their countries and try to replicate the education programs they learned abroad, even though such programs may be inappropriate for their countries. In addition, many trainers do not return home at all, so their countries lose a critical human resource. Cross-cultural consultants need to develop creative education alternatives for third-world countries that can address a country or region's specific needs, rather than simply transferring the training approaches used in developed countries.

An interesting education model is used by the Federal University of Minas Gerais in Belo Horizonte, Brazil. University faculty supervise all fieldwork in the subject areas that they teach. One of the advantages of this approach is that it allows the faculty to facilitate the development of new positions for occupational therapists. When faculty members hear of a situation in which a role might develop for an occupational therapist, they develop a rationale for the position as well as a job description. A student on fieldwork placement can then fill the position under the direct supervision of a faculty member. The faculty are frequently able to create new permanent positions after a few successful fieldwork placements. This strategy promotes development of the profession as well as quality control of fieldwork.

Conclusion

This paper describes strategies that can be used to overcome some of the dilemmas inherent in the development of occupational therapy services in the third world. The first step in the development of services is a culturally sensitive assessment. This includes the assessment of mortality and morbidity patterns, health care service distribution, and the sustainability of occupational therapy services. In addition, the extent of disability must be documented and the country's needs prioritized so that a comprehensive rehabilitation plan can be developed. The development of creative education models for occupational therapists is also an important step in the design of culturally appropriate service models.

The question remains whether the model of occupational therapy used in developed countries can encompass the rehabilitation needs of the third world. For example, should occupational therapists be involved in primary prevention programs such as vitamin supplementation and, if so, are they occupational therapists or primary health care workers? The feasibility of generic rehabilitation workers obtaining special postgraduate training by occupational therapists is another question. I believe that a critical appraisal of the assumptions that underpin occupational therapy services in developed countries as well as an in-depth understanding of the cultural and health care context of the developing country are the first steps to answering this question.

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References


