Gerontology and **Geriatrics** Education: New Models for a Demographically Transformed World

Radically evolved models for educating students across countries have opened new vistas in spreading gerontology knowledge around the globe.

emographic and epidemiological transitions have resulted in the global transformation of most of the world's populations. An increased number of older adults presents challenges and opportunities for developed and developing countries. And an increased incidence of chronic disease and number of frail elders challenge existing health and service systems, as well as informal systems of care. On the other hand, an increasing number of functionally healthy older adults, the young-old, offer unprecedented opportunities for human growth and continued involvement in later stages of life.

Both trends call for changes in aging-relevant sectors of the workforce and in late-life occupations. The reform and expansion of geriatric health and social services demand greater efforts to develop and expand education in gerontology and geriatrics on a global level.

Even in the United States, a relative bastion of gerontological education, the number of health professionals and service providers with training in gerontology and geriatrics is insufficient (Hudson, 2003). The need for additional and accelerated gerontological training, especially in less developed countries, might seem a given. But before rushing to replicate established gerontology programs on a global level, some cautions are in order. Tessore, Mezey, and Harrington (2002) recommended careful assessment of current and projected gerontological workforces, including an estimate of the proper ratio of healthcare workers to older adults in a population, and the appropriateness of geriatric specialties. Such assessments will be heavily dependent upon available resources, including formal and informal systems of care already in place, and cultural context.

In the United States, where notions of aging are heavily medicalized and existing health systems were developed to address acute episodes rather than chronic conditions, eldercare (until relatively recently) has tended toward hospitaland residential-based care. Such systems may not be optimal in other social and cultural contexts. Shared definitions of appropriate eldercare will shape gerontological workforce demands and the education or training required of those workers. Goals and systems of eldercare may differ radically across cultural contexts (e.g., to strengthen family-based strategies and community-based supports; to develop more formalized systems of care; or some combination). For example, Cuba's community-neighborhoodbased system of elder care (Sykes and Vega, 2009) would require a system of gerontology and geriatric education that fosters skills and requires mastery of realms of information (e.g., community development) that might not be regarded as essential for gerontologic education in more medicalized systems of eldercare.

To posit appropriate content for gerontology and geriatric education programs is beyond the scope of this article. But we must be cautious that our Westernized, medicalized models of gerontology and geriatric education are not transferred intact on a global level. And attempting to develop a universal set of gerontological competencies that does not take into account regional and cultural differences is a misguided goal.

Models of Gerontology and **Geriatric Education**

So how are the education and training needs of those working with older adults being addressed at the global level? A review of the descriptions of gerontology and geriatric education by country in the recent publication, The International Handbook on Aging (Palmore, Whittington, and Kunkel, 2009) reveals a scattered and varied scene across countries, with greater or lesser focus on geriatrics and tacking on gerontological content to other professional degrees, mainly in nursing and social work. Doctorallevel programs are rare in the United States and almost non-existent (except in China) elsewhere. Gerontology education is also not confined to schools and universities-health ministries and non-governmental organizations (NGO) occasionally contribute to the mix.

Various barriers work against developing strong interdisciplinary educational programs in gerontology and geriatrics, with insufficient resources topping the list. A lack of government attention to and awareness of elder issues (especially in less developed countries, where government resources tend to target infants, children, and mothers) make gerontology education a relatively low funding priority in most countries. Other barriers include the cultural assumption that families will take care

of their elders and do not require special training to do so, and underfunded infrastructures that include outdated and poorly maintained libraries, computers, and Internet connections.

The low status and low pay associated with eldercare work in developed and developing countries contribute to the perception that gerontology is not a viable occupation and deter qualified faculty from specializing in the field. Few academic institutions, even in the United States, have sufficient faculty expertise in the array of disciplines constituting gerontology and geriatrics. While the overall picture may appear somewhat dire, there are a number of exceptions offering promising examples of interdisciplinary gerontologic models that maximize resources through creative collaborations among individuals and institutions.

Network-based gerontology programs

Network-based gerontology programs are based on collaborative efforts among multiple academic institutions. Tapping the strengths of individual partner universities in given areas of gerontology or geriatrics, the resulting program offers an amalgam of courses in a variety of locations. Sometimes called a "carousel model" (Kunkel. 2009), students maintain a home base while traveling to partner institutions to take a series of intense instructional modules in various dimensions of gerontology.

The recently disbanded EuMaG was a well-known example of this model. Developed by a network of more than twenty European countries, it offered a two-year interdisciplinary, multi-locality program in gerontology. The first year of the program included a core module (covering basic concepts and theory, methods, demography, bio-gerontology, and history of the field), three subdisciplinary modules (psychogerontology, social gerontology, and health gerontology), and an integrative summer school in a rotating location depending on topic. Students in this program traveled to the institution hosting a particular module for eight days of lecture and discussions, then completed the remainder of the module and assessments at home via online

instruction. In the program's second year, students specialized in a given gerontological area, either continuing to work at home or at one of the participating EuMaG universities, and completed a master's thesis.

Westernized, medicalized models of geriatric education should not be transferred intact on a global level.

While offering exceptional opportunities for motivated students with the requisite financial resources and schedule flexibility, this model was not without challenges. Financial backing of the European Commission was crucial to the development and operation of this program. "Harmonization" of disparate credits, degree requirements, assessments, and program quality assurance across participating universities presented daunting challenges during its initiation (Meyer, 2003). The European Credit Transfer and Assurance System (European Commission, 2009) has since provided standards for comparing student performance, credits, and degrees across European countries.

Intensive gerontology training programs: the U.N.-Malta model

In an attempt to foster gerontological training, knowledge exchange, and provide a basis for aging-related international policies and programs, the United Nations initiated an agreement with the government of Malta in 1987 to establish the International Institute of Aging (INIA). The INIA is an autonomous program based in Malta, with additional satellite sites all over the world. Professors from the University of Malta, supplemented by international program tutors who are leaders in their respective areas of gerontology, provide gerontology training and support efforts to establish gerontological programs in developing countries. Student participants are service providers, health professionals, administrators, policy makers, and government and NGO workers from less developed countries who demonstrate leadership

potential to develop gerontological programs and policies in their homelands. The training programs last eleven days, and consist of lectures, seminars, site visits, and small group workshops. Each program covers practical information on one of the following topics: social gerontology, economic and financial aspects of aging, health promotion and quality of life, and policy development and implementation. The program has trained more than 1,700 people from 137 countries at the Malta site alone. However, the program has been criticized for being based solely on Western concepts and approaches (Aboderin and Ferreira, 2009).

Partnerships between individual universities

Relatively short-term but intensive partnerships between two academic institutions have been successful models for global gerontological education. Experts in gerontology program development from the Gerontology Institute at Georgia State University established a three-year partnership with faculty in the Department of Sociology and the Bureau of Education Research at Kenyatta University in Nairobi to focus on gerontological research and education (King et al., 2005). Joint conferences and workshops, faculty exchanges, book and computer donations, and collaborations on research and program development led to the eventual establishment of Kenyatta University's Diploma in Gerontology program. Such intensive and highly focused partnerships require strong commitment and sensitivity to cultural issues, but have the potential to be highly productive.

International exchange programs

The International Interdisciplinary Program for Gerontology involved a partnership among gerontology programs in three U.S. universities (Miami University of Ohio, Oregon State University, and San Francisco State University) and three European universities (Universidad de Salamanca, Spain; Universitat Heidelberg, Germany; and Vrije Universiteit Amsterdam, The Netherlands). Funded by grants from the European Commission for Culture and Education and the U.S. Department of Education, this international, interdisciplinary program promoted developing a comparative model for the study of social policy and sharing of graduate level gerontology curricula among the partnering universities. It also supported international student and faculty exchanges among consortium members for periods up to four months, enabling participants to learn the host language, discover how gerontology programs operate in other countries, and engage with gerontological field sites.

International field schools with a gerontological service-learning focus

International field schools offer opportunities for students to apply discipline-related skills within a different cultural context. Initially focused on archeological excavations, today's international field schools often involve students collecting ethnographic data and-or providing service. The NAPA (National Association for the Practice of Anthropology)-OT (Occupational Therapy) Field School is a four- to six-week international, transdisciplinary graduate level program that integrates theory, methods, and application of both anthropology and occupational science-therapy. Not confined to U.S. participants, it attracts students and faculty from around the world. Students and faculty live with Guatemalan families, study Spanish at a local Spanish-language school, engage in seminars and field trips to health-related sites, and work within local settings related to three topics, one of which is gerontology.

The gerontology component of the field school has focused on comparing two local residential care facilities for older Guatemalans, one that is government run, the other, privately owned. The anthropology students conduct ethnographies of the facilities and collect data on individual residents, which the OT students then use to develop and run individual- and facility-specific OT programs that promote functional abilities and provide meaningful group activities for residents. Students also provide in-service training for facility staff on

topics such as falls and dementia care. Toward the end of the field-school experience, gerontology students participate in an annual joint seminar with students from the occupational therapy department of San Carlos Universidad in Guatemala City, during which they present updates on the state of OT and gerontology in their respective countries. It is a simple mechanism for fostering international networking in the early stages of gerontological careers.

Educational opportunities for older adults: Universities of the Third Age

Aging-related education should not be limited to developing a global workforce attuned to the abilities and needs of older adults. Using education to optimize functioning and enhance older adults' quality of life has proliferated in recent years through the worldwide expansion of Universities of the Third Age (U3A). The philosophy of lifelong learning underpins the operations of U3A. These programs offer educational, volunteer, and leisure activities for older adults, promoting lifelong education as an avenue to personal enhancement. Often housed in universities or community-based senior centers, participants attend classes on subjects as diverse as art appreciation, understanding insurance, health updates, travel opportunities, literacy, and human rights. Some groups have conducted their own research on aging (e.g., Images of Older Persons in Malta) (Troisi, 2009). U3A is growing in popularity, especially in countries such as Mexico and Cuba. Within a four-year period, U3A in Cuba enrolled more than 30,000 students (Sykes and Vega, 2009).

Educational resources in gerontology for institutions in developing countries

The HINARI (Health InterNetwork Access to Research Initiative Program, www.who.int/ hinari/en/), established by the World Health Organization (WHO) and a number of major publishing companies, provides free or low-cost online access to biomedical and health-related literature, including some in gerontology and geriatrics, to faculty and students affiliated with

nonprofit institutions in less developed countries. Institutions in countries classified by WHO as low-income have free access: institutions in countries in the next higher income category pay a minimum fee. More than 150 publishers offer

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more than 8,500 journals and 7,000 e-books through this program. National universities, research institutes, professional schools, teaching hospitals, government offices, and national medical libraries are all eligible to participate.

The professional organization as a resource for gerontological education

The Association for Gerontology in Higher Education (AGHE) is the only professional organization devoted exclusively to gerontological and geriatrics education, and considers global education on aging one of its primary mandates. Membership is granted to institutions, rather than individuals (with some exceptions), with international dues based on a sliding scale determined by WHO income categories. Guided by feedback from the AGHE/GSA (Gerontological Society of America) Global Aging Survey, AGHE's Global Aging Committee works to foster networking, collaborations, and mentorship in gerontological education, research, and practice. (See the AGHE Global Aging Committee website [www.aghe.org] for information on its efforts to promote global gerontological education.)

The Future of Global Gerontology and Geriatrics Education

With the exceptions of academic programs and research institutes in North America and Europe, global gerontology and geriatrics education is still in its formative stage, especially in developing countries. But there are certain advantages to a delayed start. Less developed countries are taking advantage of recent technological advances and

bypassing earlier systems of information exchange that may soon be obsolete. In the not so distant past, residents of less developed countries had little access to landline telephones, but now the use of cell phones is common. In leapfrogging

> over early developments in telecommunications, these less developed areas bypassed investing in infrastructure required to support early telephone systems and now are relatively unencumbered by its soon-to-be-obsolete structures. In like manner, gerontology and

geriatrics education programs in less developed countries, in their current pre-bureaucratized state, may be less saddled by issues of "harmonization"-the synchronizing of diverse academic bureaucracies that European countries faced in developing EuMaG.

Future developments in education undoubtedly will continue to be influenced by technological advances. Distance education already has assumed an important role in gerontology education. Technological advances will reshape the ways by which information is conveyed and shared, opening opportunities for students in remote regions for equal access to online instruction and virtual communities. The rapid acceptance of innovative educational modalities, such as Massive Open Online Courses (MOOC), suggests potential for radical departures from traditional, campus-based institutions of learning. These types of courses (such as Couresera and edX) that are based on online partnerships among highly respected universities like Harvard, Stanford, and University of California, Berkeley, seem to have bypassed the institutional bureaucratic blocks encountered by more traditional attempts at university partnerships (such as EuMaG). Offering flexible and free access, and designed to support large numbers of students, MOOCs represent a potential model for sharing gerontology and geriatrics education on a global level.

The potential for co-teaching online gerontology courses by instructors in different countries, incorporating discussion boards and virtual meeting rooms to accommodate widely

dispersed students and faculty, is just now being explored (Claver and Kuo, 2012). Global online courses would be only the beginning. Opportunities for global virtual networking and mentoring in gerontology and geriatrics education seem limitless. Network-based gerontology programs that rely more heavily on online (as opposed to campus-based) learning may offer viable avenues for globally scattered students who lack the financial means and flexibility to relocate for education. The Pan American Health Organization-supported Masters in Public Health and a Public Health and Aging Specialization for health ministries, offered by the seventeencountry Latin American and the Caribbean educational consortium, represent promising

adaptations of the network-based model for gerontology programs.

Residential campuses offer unique opportunities and always will play a pivotal role in gerontology and geriatrics education. However, for developing countries with limited resources, bypassing significant investment in university buildings and campuses to target resources toward improved Internet access and virtual campuses may be the more prudent strategy.

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