The Role of Health Education Specialists in Supporting Global Health and the Millennium Development Goals

Geiger, Brian F. Ed.D., FAAHE¹; Davis, Thomas M., H.S.D.²; Beric, Bojana MD, PhD, CHES³; Michele K. Devlin, D.P.H.⁴

Author ¹ is affiliated with the University of Alabama at Birmingham College of Arts & Sciences, School of Education & Center for Educational Accountability; Author ² is affiliated with the University of Northern Iowa, Author ³ is affiliated with Monmouth University, Author ⁴ is affiliated with the University of Northern Iowa. **Contact author:** Brian Geiger, Room EB 207, 1530 3rd Avenue South, Birmingham, AL 35294-1250; **Phone:** (205)-975-5388; **Email:** bgeiger@uab.edu

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Abstract

Knowledge and skills for global health program design, implementation and monitoring is an expectation for practicing public health professionals. Major health education professional organizations including American Association for Health Education (AAHE), Society of Public Health Education (SOPHE) and International Union for Health Promotion and Education (IUHPE) participated in the 2008 Galway Conference to develop standards and quality assurance systems for enhancing workforce capacity in global health education and promotion. To help promote the health of all people, eight Millennium Development Goals (MDGs) were ratified by United Nations (UN) Member States to be achieved by 2015. Heads of state met at the General Assembly and the Secretary General reported worldwide progress concerning the achievement of MDGs during the summer of 2010. This article presents implications of MDGs for public health professionals including the topics of child and maternal mortality and women's reproductive health, HIV/AIDS, malaria and other major diseases, and environmental sustainability. Specifically, this article also discusses how health education specialists can contribute to the achievement of MDGs 3, 4, 5, 6, 7 and 8, due to their unique professional training and demonstrated competencies.

Keywords: Millennium Development Goals, global health, health education training and practice

The Millennium Development Goals and Burden of Disease Globally

Several documents (UN Universal Declaration of Human Rights, Declaration of Alma Alta, Ottawa Charter for Health Promotion) preceded formulation of the Millennium Development Goals (MDGs) in 2000. In 1978, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) adopted the Primary Health Care Initiative calling for "an acceptable level of health for the people of the world by the year 2000". To attain health for all will require major revisions and changes in health care funding and service delivery in many countries. Among these global changes are universal access to clinical services based on need; necessary community involvement to generate, define, and implement health agendas; as well as access to appropriate technology for health. Unfortunately, basic universal access, "Health for All," was not attained by the aforementioned year 2000 target date.²

The world did not lose focus on unmet health and education needs. UN Member States endorsed the Millennium Declaration in 2000 with an emphasis upon achieving eight inter-related Millennium Development Goals (MDGs) by 2015. Of particular note to health education specialists are Goals 3, 4, 5, 6, 7 and 8^3 :

- Goal 1: Eradicate extreme poverty and hunger
- Goal 2: Achieve universal primary education
- Goal 3: Promote gender equality and empower women
- Goal 4: Reduce child mortality
- Goal 5: Improve maternal health
- Goal 6: Combat HIV/AIDS, malaria and other diseases
- Goal 7: Ensure environmental sustainability
- Goal 8: Develop a global partnership for development

According to the UN Secretary-General, "the Millennium Declaration represents the most important collective promise ever made to the

world's most vulnerable people. This promise is not based on pity or charity, but on solidarity, justice and the recognition that we are increasingly dependent on one another for our shared prosperity and security". Although progress is evident, much has not been achieved. Ambassador Rick Barton (2010), U.S. Representative on the Economic and Social Council, stated "we need to redouble efforts to build momentum towards some of the goals, such as those related to maternal and child health". 5

While global expected years of life and child mortality rates have improved from 1990 to 2001, but nearly 20% of worldwide deaths (10.5 million) in 2001 were among children younger than five years of age. Close to 4 million of these deaths were to infants before 1 month of age. Nearly all (99%) of child deaths occurred in low- and middle-income countries. Further, 30% of all deaths between the ages of 15-59 years occurred in these same countries, as compared to 15% of deaths in the same age group for high-income countries. One of every three deaths worldwide is due to communicable diseases, nutritional deficiencies, and maternal and perinatal conditions. HIV/AIDS accounted for 14% of deaths due to communicable disease in 2001. 6

WHO supports a Burden of Disease Framework, a schematic illustration of determinants of excess morbidity and mortality. Outcomes include mortality and "nonhealth well-being." Determinants listed in reverse order include functional limitations, impairments, morbidity and injuries, risk factors, socioeconomic and environmental causes. Health analysts and administrators may refer to this framework when allocating finances, conducting research and planning service delivery.

A Call to Action to Support Millennium Development Goals Worldwide

What are indicators of progress to attain MDGs? How do we measure goal attainment? There is good news; some results are favorable. According to the UN, the number of persons living in extreme poverty (living on less than \$1.25 US per day), decreased from 1.8 to 1.4 billion people between 1990-2005. The percentage of children enrolled in primary grades increased by 5% from 2000-2007 in developing nations. Child mortality rates declined worldwide from 12.5 million to 8.8 million between 1990-2008.

The Child Development Index (CDI) combines performance measures of primary education, child health and nutrition. Longitudinal data reported from most countries every five years reveals improvements in the wellbeing of children. The lowest score of 0 "indicates no significant problems based on the specific child development measures." Global progress is evident from 1990 to 2006 (latest available data) as shown in Table 1. All regions of the world show some improvement, but it is not time for complacency.⁸

The number of people gaining access to potable water for drinking and cooking increased by 1.6 billion between 1990 and 2005.⁵ New HIV infections declined 30 percent between 1996 to 2008. Availability of antiretroviral therapy for HIV increased 10-fold in five years in low and middle-income countries. Efforts to reduce malaria have succeeded marked by a 50% decrease in cases in one-third of the 108 countries in which this vector-borne illness is present. Decreases are due in part to dramatic increases in use of mosquito nets by children in areas of endemic infection.^{4,5}

Unfortunately, most developing countries will likely not meet MDGs during the next five years. To achieve these goals, it is necessary to strengthen health policies, invest in public programs, provide meaningful employment, and collaborate across levels of grassroots, community, region, country, and internationally. 4,9,10 Despite the decrease in child mortality rates in developing countries from 99 deaths per 1,000 in 1990 to 72 per 1,000 in 2008, the reduction is less than the target outcome of two-thirds decrease before 2015. The rate of new tuberculosis infections is decreasing, except among African countries with high HIV prevalence rates.⁴ Clinicians are challenged by new strains of drug-resistant tuberculosis and the possibility that individuals become desensitized to repeated messages about AIDS risks.

Further, there has been little progress in reducing maternal deaths despite increases of monitored deliveries attended by skilled health workers from 53 to 61 percent in developing countries. Despite significant financial and programmatic inputs into women's health, females remain disproportionately vulnerable in many health situations, particularly in lower income nations. Access to reproductive and prenatal health care are important areas for improvement. For instance, increasing opportunities to postpone pregnancy, space childbirths, and deliver

newborns in sanitary and assisted settings are aims of international family planning programs. 11

One out of eight maternal deaths in 2005 was attributed to unsafe abortions among both married women and those with confirmed partners. More than one in 10 women in developing countries who wanted to delay or stop childbearing were not able to consistently obtain or use contraception.⁴ Unfortunately, progress to prevent transmission of HIV and treatment of AIDS is inadequate; there were five new HIV infections for every two people starting antiretroviral treatment.⁴

What are the barriers that prevent reduction of burden of disease and achievement of MDGs globally? There are numerous structural, public policy and personal barriers. These include prioritization for expenditures other than health, education and welfare needs; 10 limited awareness or misperception of health, education and economic needs among vulnerable groups (i.e., young children, migrants, refugees and internally displaced people, those who are illiterate, unemployed and disabled); delivery systems concentrated in urban areas where there is greater population density; consumers who adopt wasteful practices that contribute to deforestation, pollution and depletion of other natural resources; low health literacy, particularly among marginalized populations; limited political accountability and insufficient programs to develop grassroots leadership in communities.²

In the face of a continuing global economic crisis, rapid ethnic diversification, urban migration, climate change, natural and manmade disasters, there is the likelihood that resources will be diverted away from MDGs. If this occurs, the most vulnerable groups, including those living in extreme poverty, children without educational opportunities, and families without health care will suffer further deprivation and adverse outcomes. 4,10 In September of 2010, heads of nations convened at the General Assembly in New York for high-level plenary meetings to critically examine achievement of MDGs and pledge accelerated progress. Of note are international treaties to respect and protect human rights ratified by countries prior to MDGs. Preliminary consultation with non-governmental organizations (NGOs) and Civil Society provided the opportunity for health education specialists to advocate for leadership within countries to alleviate suffering and allocate resources that will enhance access to education, employment and health.

Competencies for the Health Education Specialists

What is the connection between health education and global health issues? The constitution of the WHO specified "enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political, economic or social condition". Essential to realizing this basic human right is access to health information, leadership development, and health services that are not yet available to all people. The Institute of Medicine (IOM) concluded that patients in the U.S. are aging, likely to present with chronic illness, reflect diverse cultures, values and needs, and often seek health information, yet health care providers are ill equipped to manage these needs. 13

Further, IOM anticipated a global shortage of 3.5 million health professionals by the year 2030. This shortage represents a 35% increase of need to maintain current level of service. Harton⁵ (United States Ambassador to UN) concluded that "while achieving the MDGs is a global imperative, experience has shown that practical progress depends on efforts at the national and local level." The U.S. Mission to the UN deemed "sustainable systems that deliver health, education, nutrition, water management and other services" as "essential if MDG development gains are to prove lasting". Health education specialists may contribute knowledge to establish integrated delivery systems.

Knowledge and skills for global health program design, implementation and monitoring is an expectation for practicing public health professionals. Today's graduates of entry- and advanced-level degree programs should understand inputs leading to desired global health outcomes, barriers to progress and remedies for complex health problems.

Health education advocates should ask of their elected and appointed officials, public health and education leaders two key questions: What commitments have been made to enhance the health of children, families and adults? and What are the consequences of failing to act? In his inaugural address, US President Woodrow Wilson stated, "...Nowhere else in the world have noble men and women exhibited in more striking forms the beauty and energy of sympathy and helpfulness and counsel in their efforts to rectify wrong, alleviate suffering, and set the weak in the way of strength and

hope...The great Government we loved has too often been made use of for private and selfish purposes, and those who used it had forgotten the people...The firm basis of government is justice, not pity". 15

The American Association for Health Education (AAHE), The Society for Public Health Education (SOPHE) and The International Union for Health Promotion and Education (IUHPE) and its North American Regional Office (NARO), the professional associations of health education specialists, hold consultative status as non-governmental organizations (NGO) to the UN and have representatives to the Department of Public Information (DPI). In addition, the IUHPE/NARO has a consultative status to UN Economic and Social Council (ECOSOC), which allows for effective communication and input on decisions made within the UN on issues related to MDGs.

AAHE has participated in hearings at the UN General Assembly, consultation with other NGOs and civil society groups across the globe. In these meetings, AAHE representatives emphasized the value of professionally trained health education specialists as state and community resources to assist with MDG attainment. The SOPHE and IUHPE representatives were also actively involved in the work and advocacy efforts within the Working Group of Girls (WGG), the NGO with UNICEF. The efforts were directed towards preparing statements affirming rights of girls and women sent to country representatives with Permanent Missions to the UN prior to the General Assembly.

AAHE joined 1,600 participants from 350 NGOs and 70 countries during the 63rd Annual UN DPI NGO Conference held in the fall of 2010 in Australia. Conferees issued a *Declaration to Advance Global Health and Achieve the MDGs*, which was circulated to NGOs, government agencies and policy makers worldwide. The declaration called for "committing the finances and political will necessary to achieve the MDGs," including two priorities most relevant to health education specialist advocates:

- 1. Ensure that national health and nutrition plans prioritize integrated and evidence-based health promotion, illness prevention and treatment services for all people.
- 2. Actively support, encourage and resource community voices to be heard through active representation in program planning,

implementation and evaluation; always including representation of women and men, children, youth and older persons, indigenous peoples, the disabled and marginalized groups.

Further, NGOs in consultation with the UN affirmed the necessity of accountability frameworks for MDG goal attainment, including "guaranteeing civil and political rights of participation and organization" and "strengthening the capacity of all stakeholders to engage".²

Seven major competencies and related subcompetencies established by The National Commission for Health Education Competencies (NCHEC) guide pre-professional education and practice across national and international settings. These competencies affirm preparation of health education specialists, who are enabled to collaborate with health professionals across related disciplines. Several competencies are highlighted to illustrate the unique training of health education specialists that can impact on MDGs:

- 1A: Obtain health-related data about social and cultural environments, growth, and development factors, needs, and interests.
- 2A: Identify community organizations, resource people and potential participants for support and assistance in program planning.
- 3C: Select methods and media best suited to implement program plans for specific learners.
- 4C: Discuss how to interpret results of program evaluation.
- 5B: Formulate practical modes of collaboration among health agencies and organizations.
- 6B: Discuss how to establish effective consultative relationships with those requesting assistance in solving health-related problems.
- 7B: Predict the impact of societal value systems on health and fitness education programs.

The next section of this paper describes how concerned health education specialists may act in support of MDGs implementation.

The Galway Consensus Conference

Today's professional health education specialists are expected to demonstrate abilities to conceptualize, develop, implement, and evaluate global health projects. There was no worldwide consensus on competencies for this profession until the summer of 2008. During that time, the SOPHE and IUHPE sponsored a gathering, "Toward International Collaboration on Competencies and Accreditation in Health Promotion and Health Education: The Galway Consensus Conference" at the National University of Ireland, Galway. As a non-governmental organization with a mission to enhance the quality of professional preparation for health education specialists, AAHE was represented during the 2008 Galway Conference. Several AAHE members including its former executive director were conference participants.

The Galway Conference resulted in standards and quality assurance systems to enhance workforce capacity in global health education and promotion. ¹⁸ International health education and health promotion professionals reached consensus on eight domains of core competency:

- 1. Catalyzing change—Enabling change and empowering individuals and communities to improve their health. This includes emphasizing personal and collective responsibility for community action to reduce health risks.
- 2. *Leadership*—Providing strategic direction and opportunities for participation by all in developing healthy public policy, mobilizing and managing resources for health promotion, and building capacity.
- 3. Assessment—Conducting assessment of needs and assets in communities and systems that leads to the identification and analysis of the behavioral, cultural, social, environmental, and organizational determinants that promote or compromise health.
- 4. *Planning*—Developing measurable goals and objectives in response to assessment of needs and assets and identifying strategies that are based on knowledge derived from theory, evidence, and practice.
- 5. *Implementation*—Carrying out effective and efficient, culturally sensitive, and ethical strategies to ensure the greatest possible

improvements in health, including management of human and material resources.

- 6. Evaluation—Determining the reach, effectiveness, and impact of health promotion programs and policies. This includes utilizing appropriate evaluation and research methods to support program improvements, sustainability, and dissemination.
- 7. Advocacy—Advocating with and on behalf of individuals and communities to improve their health and well-being and building their capacity for undertaking actions that can both improve health and strengthen community assets.
- 8. *Partnerships*—Working collaboratively across disciplines, sectors, and partners to enhance the impact and sustainability of health promotion programs and policies.

One can deduce the fundamental need to assure population groups exert control over programs meant to be of benefit; receive assistance to collaborate across programs and services provided by government agencies, NGOs, and civil society; and learn how to plan, implement and monitor delivery of health education and clinical services.

Ways Health Education Specialists Could Support the MDGs

The US Mission to the UN identified three strategies as essential to building enabling environments to achieve MDGs. All correspond with the aims of health education and health promotion in communities: 1) promote a culture of impact evaluation, high quality process evaluation, and evidence based policy; 2) support indigenous monitoring and evaluation capacity in developing countries; and 3) improve the quality of data available to measure progress toward the MDGs. ¹⁹

The UN Committee on the Rights of the Child articulated strategies for action deserving support by health education specialists working within countries including...

(a) Adopting a coordinated and cost-effective strategy to accelerate the reduction of undernutrition in children, including the effective use of micronutrients, especially for infants (6 to 24 months) and adolescents, and continue to work

with parents, family members, health workers, and community leaders to change negative behavior regarding children's nutrition: (b) including prevention and reduction of young child injuries and accidents in coordinated strategies to achieve MDG 4 (reduction of child mortality); & (c) taking all necessary measures to increase access to free primary health services with particular attention to pre-natal and post-natal care for children and their mothers. Other strategies include (a) carrying out, in partnership with relevant and competent partners, awareness raising campaigns on the importance of antenatal care, neonatal care and breastfeeding; (b) adopting specific measures to ensure that minority and indigenous children are not discriminated against in the enjoyment of their right to access basic and specialized health services; (c) undertaking a comprehensive study in order to understand the nature and extent of adolescent health problems, with the full participation of adolescents, and use this as a basis for the formulation of adolescent health policies and programs, with particular attention to female adolescents; (d) paying special attention to the psycho-social needs of adolescents, especially girls, and provide appropriate, child-friendly, and confidential counseling services in schools and clinics and disseminate information about their existence and availability.20

These are a sample of recommendations that are relevant to Responsibilities and Competencies for school, clinical and community health education specialists.

In conclusion, health education specialists may contribute to achievement of MDGs 3, 4, 5, 6, 7 and 8, due to their unique professional training and demonstrated competencies. There are many opportunities to collaborate through developing partnerships with colleagues across health-related disciplines, civil society, and community members, both locally and globally. For instance, the Episcopal Church of the United States supports educating congregations about MDGs leading to action in the U.S. and abroad. Individual members are encouraged to donate funds in support of prenatal and postnatal care programs, dedicate time and talents to fight disease worldwide, among others.²¹ Expected outcomes of mutual action are reduced discrimination of women and girls, reduced violence against children, decreased child mortality, improvements in

maternal health, combating HIV/AIDS, malaria and other diseases (particularly within cross-cultural settings), and teaching others about impacts of recycling on environmental sustainability.

Health education specialists may advocate for, and develop breakthrough plans to accelerate achievement of MDGs worldwide. They may also join with government agencies and civil society organizations to implement education and training programs, and monitor their progress. Interested members of AAHE, IUHPE/NARO and SOPHE should contact their official delegates to participate in consultation with the UN Department of Public Information (DPI) and ECOSOC regarding implementation of MDGs. Health education specialists may empower community residents as leaders, promote discourse with government agencies and NGOs, and expect action. Of particular interest is monitoring quality, equity, and continuity of programs and services. Health education specialists will play an important role in the 21st century, as agents of change and as knowledgeable practitioners who advocate for universal human rights and health care access.

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References

- 1. World Health Organization and UNICEF. Primary Health Care: Report of the International Conference on Primary Health Care; September 6-12, 1978; Alma Alta, USSR.
- 2. UN Non-Governmental Liaison Service [UN NGLS]. Towards a Global MDG Breakthrough Plan: An NGLS Global Civil Society Consultation Report. Geneva and New York: Author; July 2010.
- 3. UN Department of Public Information.

 **Millennium Development Goals: At a Glance Factsheet. New York: Author; April 2010.

- 4. UN. Keeping the Promise: A Forward-looking Review to Promote an Agreed Action Agenda to Achieve the Millennium Development Goals by 2015. Report of the Secretary-General [A/64/665]; New York: Author; February 12, 2010:2.
- 5. Barton, R. Statement by Ambassador Rick Barton, U.S. Representative on the Economic and Social Council to the United Nations, at Informal Plenary on MDG Summit. New York: U N; April 29, 2010. http://usun.state.gov/briefing/statements/2010/141363.htm. Accessed 5 September, 2010.
- 6. Lopez, AD, Mathers, CD, Ezzati, M, et al. *Global Burden of Disease and Risk Factors*. New York: The World Bank & Oxford University Press; 2006.
- 7. Mathers and others, as cited in Lopez, AD,
 Mathers, CD, Ezzati, M, et al. *Global*Burden of Disease and Risk Factors. New
 York: The World Bank & Oxford University
 Press; 2006: 2.
- 8. Cheung, M & Delavega, E. Child Development Index. *Social Development Issues*; 2009;31,3: 86-90.
- 9. UN Development Program. Beyond the Midpoint:
 Achieving the Millennium Development
 Goals. New York: Author; January 2010.
 http://content.undp.org/go/newsroom/publications/poverty-reduction/poverty-website/mdgs/beyond-the-midpoint.en.
 Accessed April 19, 2010.
- 10. UN. Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System. New York: Author; September 21, 2009. http://www.un.org/ga/econcrisissummit/docs/FinalReport_CoE.pdf Accessed May 6, 2010.
- Clark Callister, L. Maternal Mortality and Human Rights. New York: U N Office of the High Commissioner on Human Rights; December 2009. www2.ohchr.org/english/issues/women/docs/responses/DIIFSD.doc Retrieved January 28, 2011.

- 12. World Health Organization. *The World Health Report 1998: Life in the 21st Century: A Vision for All;* Geneva, Author; 1998:19.
- 13. Greiner, AC & Knebel, E. Health Professions
 Education: A Bridge to Quality.
 Washington, D.C.: Board on Health Care
 Services, Institute of Medicine, The
 National Academies Press; 2003.
- 14. American Psychiatric Association. IOM warns of shortfalls in the workforce that will provide care to the aging population. *News & Notes. Psychiatric Services*. May 2008; *59*:584-585.
- 15. Lott, DN. *The Presidents Speak*. New York, NY: Henry Holt and Company, Inc.; 1994; 233-237.
- 16. UN Department of Public Information. 63rd
 Annual United Nations DPI/NGO
 Conference. Advance Global Health:
 Achieve the MDGs. A Declaration; August
 30-September 1, 2010; Melbourne,
 Australia.
- 17. National Commission on Health Education Credentialing [NCHEC]. *Responsibilities and competencies*. Whitehall, PA: Author; 2002. http://www.nchec.org/credentialing/responsibilities/. Accessed September 1, 2010.
- 18. Allegrante, JP, Barry, MM, Airhihenbuwa, CO, et al. Domains of Core Competency, Standards, and Quality Assurance for Building Global Capacity in Health Promotion: The Galway Consensus Conference Statement. *Health Education & Behavior*; 2009;36: 476-482.
- U.S. Mission to the U.N. Celebrate, Innovate and Sustain: Toward 2015 and Beyond. The United States' Strategy for Meeting the Millennium Development Goals. New York: Author; July 2010. http://usun.state.gov/documents/organization/145899.pdf. Accessed September 5, 2010.
- 20. UN Committee on the Rights of the Child. Consideration of Reports Submitted by States Parties Under Article 44 of the Convention. New York: Author; June 26, 2009.

- http://www2.ohchr.org/english/bodies/crc/docs/co/CRC.C.BGD.CO.4_en.pdf
 Accessed January 28, 2011.
- 21. Episcopal Relief and Development. *The MDGs* and *You*. New York, NY: Episcopal Church of the United States. (n.d.)

Table 1. Child Well-Being Indicators Reported by Save the Children in 2009

Time Period	CDI Score	Primary Education	Health Care	Nutrition
1990-94	26.6	21.1	27.5	31.2
1995-99	21.9	15.9	24.3	25.6
2000-06	17.5	11.4	18.4	22.5

Source: Cheung, M & Delavega, E. Child Development Index. Social Development Issues; 2009;31,3: 86-90.