

ORIGINAL RESEARCH

The Global Health Nursing Imperative: Using Competency-Based Analysis to Strengthen Accountability for Population Focused Practice, Education, and Research



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Abstract

BACKGROUND The Quad Council Competencies for Public Health Nurses are used to guide community and public health nursing course development in baccalaureate nursing programs. As clinical practice has expanded to global settings, the appropriateness of the 2011 Quad Council Public Health Nursing (PHN) Competencies to guide global clinical practice and evaluation was questioned.

OBJECTIVE To describe a comparison and analysis of three sets of competencies: PHN competencies, competencies for global health nurses, and interprofessional competencies for health professionals.

METHOD A literature review identified the most current guidelines and competencies for global health practice. Two seminal articles, "Global Health Competencies for Nurses in the Americas" and "Identifying Interprofessional Global Health Competencies for 21st-Century Health Professionals," were reviewed and compared with the 2011 Quad Council Public Health Nursing Competencies. A six-member multi-site team conducted a qualitative thematic approach to competency analysis. A four column crosswalk spreadsheet grid was used for comparison of the three sets of competencies. Column four was created to identify possible exemplars for clinical practice.

FINDINGS Gaps exist in the PHN competencies for specific global and interprofessional competencies.

RECOMMENDATIONS Enhanced and consistent emphasis on population/global health, and interprofessional content throughout nursing curricula is necessary to prepare providers for practice in global settings. Incorporation of global and interprofessional competencies should be considered in the revision of competencies for PHN practice to enhance productive contributions to community health outcomes. Consideration of proper placement of content gaps within basic and advanced nursing education as well as leveling for community/public health nursing practice needs to be addressed by nursing education and practice. In the interim, a special course or elective may be appropriate, especially for schools having clinical nursing practicums in international settings. Clinical evaluation in low-resource settings needs to be enhanced and aligned with competencies.

KEY WORDS public health nursing, nursing competencies, global health nursing, global health competencies, interprofessional nursing

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INTRODUCTION

Over the past two decades, much discussion on health occurs under the umbrella of population health, which is built upon a long tradition of public health, community health and health promotion. The passage of the Affordable Care Act placed a renewed emphasis on population health and created a shift in focus for health care.¹ The recent epidemic of Ebola and Zika substantiates that focusing only on local or national health care problems is no longer possible. There now exists a greater understanding that in our global society, disease and social determinants transcend continents. By the year 2050, the population of North America will increase by 1% as a result of immigration and globalization.² Population health must embrace new meaning related to local impacts of globalization. Increased international mobility, global interdependence, and global collaboration create a momentum for a prepared workforce to address the issues of global health.³

The College Learning Report for the New Global Century discusses the aims and outcomes of preparing students for the 21st century global realities.⁴ The authors of this report describe the need for students to have personal and social responsibility, local and global civic knowledge and engagement, and intercultural knowledge and competence. These outcomes need to be anchored through active involvement with diverse communities and real-world challenges. Current undergraduate curricula increasingly provide opportunities for education in local and global settings with diverse populations. Program models such as study abroad, medical mission trips, exchange programs, and national health-related partnerships are currently being offered in baccalaureate programs. These programs provided the stimulus for this analysis. Students in various disciplines seek opportunities for international exposure and global work and application. The 2008 Essentials of Baccalaureate Education for Professional Nursing practice requires global health be included as an essential component of the nursing curriculum. The document identifies that (1) the increasing globalization of health care and diversity of the nation's population has resulted in a more diverse and global nature in which nurses practice; (2) liberal education is a requirement for equipping nurses to be responsible citizens and to engage with the larger community, both locally and globally; and (3) nursing curricula need to prepare nurses with skills to practice in multicultural

environments. These essential underpinnings of undergraduate baccalaureate curricula provide the foundation for clinical learning experiences in local and global settings.⁵

Community service opportunities abroad are an integral component of undergraduate community and public health nursing courses.⁶ Service learning, however, has often been confounded with other types of activities such as volunteerism and direct client care experiences.⁷ The sustainability of service-learning projects, especially in international contexts, is a concern,⁸⁻¹³ whereas competency-based community projects provide stimulus for increased partnership, empowerment, and collaboration to influence global health outcomes.

Global health practice is guided by the United Nations' Sustainable Development Goals (SDGs), a universal set of goals, targets, and indicators that follow and expand on the Millennium Development Goals.¹⁴ The Millennium Development Goals, though progressive, fell short of their 2015 goals as they focused on health outcomes rather than the sustainable means to meet these goals.^{15,16} The SDGs were developed to address all the social determinants of health. They were adopted in 2015 and extended until 2030. In addition to the SDGs, the 2011 Quad Council Competencies for Public Health Nurses were developed to guide 3 levels of practice (generalist, management or supervisory, and senior management or leadership).¹⁷ These competencies provide benchmarks for community and public health baccalaureate nursing faculty for Tier 1 generalist roles. Furthermore, global health practice competencies and interprofessional global health competencies have been developed to guide nursing curricula development and practice.^{3,18} Nurses who volunteer or seek work must understand and use competencies of global health practice and interprofessional practice in community and public health in both local and global settings.

Background. A multisite team of investigators from 4 US academic institutions have been using the Quad Council Competencies for Public Health Nurses to guide community and public health nursing course development in baccalaureate nursing programs. A clinical evaluation tool was developed based on the 8 domains and the 76 competencies delineated for Tier 1 generalist community and public health nursing practice. Tier 1 competencies are primarily focused on the baccalaureate generalist nurse's role. As investigators expanded clinical practice into global clinical settings, specifically Botswana, Guatemala, India, and Uganda, the

team questioned the appropriateness of the public health nursing competencies to guide global clinical practice and evaluation. The team reviewed global health literature to identify clinical competencies in global settings.

The term *competency* is not new in nursing literature. This and other terms have been defined by professional groups, such as the American Nurses Association (ANA),¹⁹ National Council on State Boards of Nursing,²⁰ Institute of Medicine,²¹ nursing specialty groups, and other professional groups.²² The ANA Leadership Institute 2013 stated that “**competency** is an expected level of performance that integrates knowledge, skills, abilities, and judgment.”^{23p3}

The Quad Council Competencies were compiled by a coalition of 4 practice and educational organizations, which included the Association of Community Health Nurse Educators; the ANA’s Congress on Nursing Practice and Economics; the Association of State and Territorial Directors of Nursing, which changed its name in 2012 to the Association of Public Health Nursing; and the American Public Health Association—Public Health Nursing Section.¹⁷ These competencies help guide improvement in population, community, and public health baccalaureate nursing education.

The Quad Council Competencies represent a national set of public health competencies that denote knowledge, skill, and attitudes needed in the broad context of nurse professionals who support the work of improving the health of populations.¹⁷ These competencies are becoming increasingly critical to the public health nursing workforce and public health departments seeking accreditation through the Public Health Accreditation Board. The competencies are nationally recognized, practice-focused, and evidence-based standards. These competencies align with the core principles of public health: assessment, policy, and assurance and support the work of protecting the populations where people live, work, learn, and play. There are 8 skill domains: Analytical and Assessment, Policy Development/Program Planning, Communication, Cultural Competency, Community Dimensions of Practice, Public Health Science, Financial Planning and Management, and Leadership & Systems Thinking. Each domain delineates specific competencies for a total of 76 competency statements. These competencies are considered the professional standard for community and public health nurses.

Purpose. The purpose of this paper is to describe a comparison and analysis of 3 types of competencies:

competencies for public health nursing, global health competencies for nurses, and interprofessional competencies for health professionals. Global health goals, targets, and indicators provide a guide for collaboration and partnership. The discipline of nursing must be prepared to be an integral contributor in the global workforce. This imperative means that results of this analysis must be used to guide community and public health nursing education, practice, and research to effectively contribute to local, national, and global health care delivery and policy.

METHODS

A literature review identified the most current guidelines and competencies for global health practice. Two seminal articles, “Global Health Competencies for Nurses in the Americas”³ and “Identifying Interprofessional Global Health Competencies for 21st-Century Health Professionals,”¹⁸ were reviewed and compared with the 2011 Quad Council Public Health Nursing Competencies.¹⁷

Global Health Competencies were developed through an exploratory descriptive survey lead by a team of faculty members at 4 Pan American Health Organization/World Health Organization (WHO) Nursing Collaborating Centers: The University of Alabama at Birmingham, Johns Hopkins University, the National University of Mexico, and the University of Sao Paulo at Ribeirao Preto College of Nursing. There are 6 subscales/domains: Global Burden of Disease; Health Implications of Migration, Travel, and Displacement; Social and Environmental Determinants of Health; Globalization of Health & Health Care; Health Care in Low-Resource Settings; and Health as a Human Right and Development Resource. Each subscale delineates items for a total of 30 competencies.³

Interprofessional Global Health Competencies were developed by a subcommittee of invited professionals by the Center for Global Education Initiatives at the University of Maryland, Baltimore. The subcommittee subsequently joined the Consortium of Universities for Global Health Global Competency Subcommittee. The combined work of these committees delineated a list of competencies categorized into 11 domains: Global Burden of Disease; Globalization of Health & Health Care; Social and Environmental Determinants of Health; Capacity Strengthening; Collaboration, Partnering, and Communication; Ethics;

Professional Practice; Health Equity and Social Justice; Program Management; Sociocultural and Political Awareness; and Strategic Analysis. The domains include a total of 39 competencies.¹⁸

Our multisite team developed a crosswalk spreadsheet grid with 4 columns to identify and record findings. The first column of the crosswalk delineated Tier 1 Quad Council Competency for Public Health Nursing. Column 2 represented the validation of Global Health Competencies in relation to the Quad Council Public Health Nursing Competencies. Column 3 represented the validation of the Interprofessional Global Health Competencies. Column 4 was created to identify and propose possible exemplars for clinical practice and experience. Three teams consisting of 2 members were assigned to each of the 8 domains for initial analysis and comparison. Each team met completed analyses and provided data for the crosswalk. The multisite team held a formal face-to-face meeting to review the crosswalk and foster multisite interpretation and comparative analysis. Follow-up meetings led to discussion of similarities, gaps, and differences among and across the 3 sets of competencies.

The following section contains an overview of each of the 8 Quad Council domains. Under each domain overview the differences between the Quad Council domain and the respective global health and interprofessional domains are delineated with italics. Italics are used to signify direct quotes and validate specific differences between the 3 sources. The explicit documentation is followed by an analysis summary and recommendations related to each Quad Council domain.

RESULTS AND DISCUSSION

Domain 1: Analytic and Assessment Skills. A community and public health nurse (C/PHN) applies the skillset of both nursing and public health science to effectively participate in the community health assessment process, a core public health function. This requires use of a systematic approach using valid and reliable methods and instruments for collecting qualitative and quantitative data on the health of communities. Assessment includes epidemiological data, the social determinants of health and illness while encouraging community participation and engagement. This process guides the C/PHN in the analysis to identify gaps and redundancies; application of ethical, legal, and policy

guidelines; and the practice of evidence-based public health nursing.

Differences in Global Health Competencies. Differences in Global Health Competencies include the following.³

- Domain 1: *Global Burden of Disease*
Describe the major causes of morbidity & mortality around the world and how the risk varies with regions.
- Domain 2: *Health Implications of Migration, Travel, and Displacement*
- Domain 5: *Health Care in Low-Resource Settings*
Articulate barriers to health and health care in low-resource settings locally & internationally.
Identify signs & symptoms for common major diseases that facilitate nursing assessment in the absence of advanced testing often unavailable in low resource settings.

Differences in Interprofessional Global Health Competencies. Differences in Interprofessional Global Health Competencies include the following.¹⁸

- Domain 1: *Global Burden of Disease (GBD)* includes *the major causes of morbidity and mortality around the world and how risk for disease varies with regions.*
- Domain 6: *Ethics*
Demonstrate an awareness of local and national codes of ethics relevant to one's working environment.
- Domain 8: *Health Equity and Social Justice*

The definition of global health is rooted in health equity and social justice.

- Domain 11: *Strategic Analysis*
Identify how demographic and other major factors can influence patterns of morbidity, mortality, and disability in a defined population.
Conduct a community health needs assessment.
Conduct a situation analysis across a range of cultural, economic and health contexts.

Analysis summary Domain 1: Analytical and Assessment Skills. The Global Health Competencies and the Interprofessional Competencies validate the domain of Analytic and Assessment Skills including community assessment of demographic factors influencing morbidity, mortality, and disability. The Interprofessional Global Health Competencies use the term *strategic analysis* to reflect similar skills such as assessment, analysis, critical thinking, and decision making. A question to be asked is: Is there a difference in the skills needed for a community assessment versus a community needs assessment? The Quad Council Competencies for Public Health Nurses do not specifically identify assessment with

analytic skills related to morbidity and mortality around the world and variations between regions. The lack of reference to the previously listed differences for global practice and interprofessional work needs to be specifically addressed when coursework or practicums are planned and implemented in another country. Another issue is language barriers and the need for universal terminology. Schwei et al²⁴ indicate that language barriers affect access to health and health care globally. Daily et al²⁵ advocate for preparing health care providers to meet the needs of populations, specifically those affected by disaster. Hull²⁶ states that medical language is a universal construct in health care that is shared by health care providers, including allied health professions. One way of improving language barriers is to initiate a standard set of competencies to implement best practices locally, nationally, and globally.

Recommendations. Recommendations include the following.

1. Change assessment skills to precede analysis. The competencies need to reflect systems thinking patterns of investigation.
2. Strengthen international perspective in public health nursing practice in assessment and analysis.
3. Introduce specific skills necessary to identify the strengths, needs, and goals of communities (ie, focus groups, multisector collaboration) that must to be used in practice.
4. Increase attention on the concepts of health equity and social justice.
5. Use a universal terminology to represent a similar skill set.
6. Improve language barriers by initiating a standard set of competencies to implement best practices locally, nationally, and globally.

Domain 2: Policy Development and Program Planning Skills. A C/PHN identifies policy issues relevant to the health of individuals, families, populations, and communities. Knowing the structure, functions, and implications of the public health system from the federal/national, state, and local levels is imperative for a C/PHN to provide care and reduce health disparities across the life span. Policy development, a core public health function, is the process of planning health-related rules and guidelines that include plans for implementation. Program planning is a decision-making process that involves goals, interventions, and projected outcomes. The planning process is based on the

assessment of a community and/or population. A community and public health nurse develops health care services and programs based on assets, limitations, and requests within the community or population being served.

Differences in Global Health Competencies. Differences in Global Health Competencies include the following.³

- Domain 1: *Global Burden of Disease*
Describe the major public health efforts to reduce disparities in global health.
Discuss priority setting, health care rationing and funding.
- Domain 4: *Globalization of Health and Health Care*
Analyze how global trends in health care practice, commerce and culture, multinational agreements and multinational organizations contribute to the quality and availability of health and health care locally and internationally.
Describe different national models or health systems for provision of health care & their respective effects on health & health expenditure.
- Domain 3: *Social and Environmental Determinants of Health*
Describe how social & economic conditions such as poverty, education, and lifestyle effect health & access to health care.

Differences in Interprofessional Global Health Competencies. Differences in Interprofessional Global Health Competencies include the following.¹⁸

- Domain 1: *Global Burden of Disease*
Describe the major public health efforts to reduce disparities in global health.
Validate the health status of populations using available data.
Describe different national models or health systems for provision of health care and their respective effects on health and health care expenditures.
- Domain 4: *Capacity Strengthening*
Collaborate with a host or partner organization to assess the organization's operational capacity.
Cocreate strategies with the community to strengthen community capabilities, and contribute to reduction in health disparities and improvement in community health.
Integrate community assets and resources to improve the health of individuals and populations.
- Domain 8: *Health Equity and Social Justice*
Implements strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.
- Domain 9: *Program Management*
Plan, implement, and evaluate an evidence-based program.
Apply project management techniques throughout program planning, implementation, and evaluation.
- Domain 11: *Strategic Analysis*
Design context-specific health interventions based on a situation analysis.

Analysis summary Domain 2: Policy Development and Program Planning Skills. The Global Health Competencies and the Interprofessional Competencies support Domain 2 policy development and program planning skills related to Global Burden of Disease, capacity strengthening, health equity and social justice, program management, and strategic analysis. The Quad Council Competencies for Public Health Nurses do not address how policy development and program planning skills apply from a worldwide perspective. Although the Global Health Competencies provide a foundation for community and public health practice, there is a need to identify the benefits of using global practice settings for educational nursing experience. Using global settings will necessitate curricula evaluation to amend didactic content and ensure successful, valuable clinical experiences.

Recommendations. Recommendations include the following.

1. Increase emphasis on international plans and programming that are guided by the United Nations Sustainable Development Goals.¹⁴
2. Involve collaboration and partnerships to provide sustainable health outcomes related to the community needs and goals.
3. Focus student clinical experiences on marginalized and vulnerable populations, such as groups who have migrated to the United States, to emphasize social justice, health equity, and global health practice locally.
4. Investigate at the curricula level whether undergraduate nursing students are prepared and ready for global health setting experiences.

Domain 3: Communication Skills. A C/PHN must possess skills that respect diverse values and beliefs to communicate and engage with individuals, families, populations, and communities to effectively solicit information in order to identify strengths and needs of those being served. In addition, the C/PHN is a member of interprofessional team that advocates for positive health outcomes by presenting targeted health information and articulating the role of public health nursing to internal and external audiences. This requires soliciting and interpreting information effectively in written, oral, and electronic formats. In achieving optimal communication skills, the C/PHN must consider level of engagement, communication style, health literacy, and cultural difference in time orientation while delivering care.

Difference in Global Health Competencies. Difference in Global Health Competencies include the following.³

- **Domain 2: Health Implications of Migration, Travel and Displacement**
Communicate effectively with patients and families using a translator.
Describe how cultural context influences perception of health and disease.
- **Domain 3: Social and Environmental Determinants of Health**
Describe the impact of low income, education and communicating factors on access to and quality of health care.
- **Domain 5: Health Care to Low-Resource Settings**
Articulate barriers to health and health care in low-resource settings locally and internationally.

Differences in Interprofessional Global Health Competencies. Differences in Interprofessional Global Health Competencies include the following.¹⁸

- **Domain 5: Collaboration, Partnering, and Communication**
Include representatives of diverse constituencies in community partnerships and foster interactive learning with these partners.
Demonstrate diplomacy and build trust with community partners.
Communicate joint lessons learned to community partners and global constituencies.
Exhibit inter-professional values and communication skills that demonstrate respect for, and awareness of, the unique cultures, values, roles/responsibilities and expertise represented by other professionals and groups that work in global health.
- **Domain 7: Professional Practice**
Articulate barriers to health and health care low-resource settings locally and internationally.

Analysis summary Domain 3: Communication Skills. Both the Global Health Competencies and the Interprofessional Competencies include communication skills within their competencies. The Interprofessional Competencies identified Collaboration, Partnering, and Communication as a specific domain, whereas Global Health Competencies was described under 3 identified categories. This includes Domain 2: Health Implications of Migration, Travel and Displacement, Domain 3: Social and Environmental Determinates of Health, and Domain 5: Health Care in Low-Resource Settings. The Quad Council Competencies for Public Health Nurses does not address how communication skills are used globally but does list the

importance of communicating effectively to local multiple audiences that include individuals, families, and groups as well as participating as member of the interprofessional team. A strength of the public health nursing competencies is addressing health literacy. Would this assessment on health literacy be more appropriate in Domain 1: Analytical and Assessment Skills? Skills that may be required to work in conjunction with a translator may be important for local and global health practice. Consideration of language, time orientation, wording, pace, and translation are relevant for curricula consideration.

Recommendations. Recommendations include the following.

1. Link the influence of culture to health and disease.
2. Actualize Global Health Competencies and Interprofessional Competencies in local low-resource settings.
3. Address assessment of health literacy.
4. Consider language, time orientation, wording, pace, and translation in curricula and training.

Domain 4: Cultural Competency Skills. A C/PHN uses the social and ecological determinants of health to adapt public health nursing care based on cultural needs and differences. The C/PHN uses concepts, knowledge, and evidence of the social determinants of health as well as information technology to demonstrate culturally appropriate public health nursing practice while promoting a culturally responsive work environment. The C/PHN goal is providing care to diverse populations while demonstrating respect, openness, inquiry, and adaptation in the delivery of care across the lifespan.

Differences in Global Health Competencies. Differences in Global Health Competencies include the following.³

- **Domain 2: Health Implications of Migration, Travel and Displacement**
Describe how cultural context influences perceptions of health & disease.
Make an appropriate assessment or referral.
- **Domain 3: Social and Environmental Determinants of Health**
Describe how social & economic conditions such as poverty, education, and lifestyle effect health & access to health care.
List major social determinants of health & their impact on differences in life expectancy between & within countries.

Describe the impact of low income, education & communication factors on access to & quality of health care.

- **Domain 4: Globalization of Health and Health Care**
Analyze general trends & influences in global availability & movement of health care workers.

Describe national and global healthcare worker availability & shortages.

Describe common patterns of health care worker migration & impact on health care availability.

- **Domain 5: Health Care in Low-Resource Settings**
Identify barriers to appropriate prevention and treatment programs in low-resource settings.

Demonstrate an understanding of cultural & ethical issues in working with disadvantaged populations.

Differences in Interprofessional Global Health Competencies. Differences in Interprofessional Global Health Competencies include the following.¹⁸

- **Domain 3: Social and Environmental Determinants of Health**

Describe how cultural context influences perceptions of health & disease.

List major social & economic determinants of health and their effects on the access to and quality of health services and on differences in morbidity & mortality between and within countries.

- **Domain 4: Capacity Strengthening**

Describe general trends and influences in global availability and movement of health care workers.

Develop understanding and awareness of the health care workforce crisis in the developing world, the factors that contribute to this this, and strategies to address this problem.

Analysis summary Domain 4: Cultural Competency Skills. The delineation of migration, travel, displacement, and globalization of health and health care is unique to both the Global Health Competencies and the Interprofessional Global Health Competencies. These competencies are not addressed in the Quad Council Public Health Nursing Competencies. Appropriate referral suggests an increased need to emphasize the stages of the referral process and community resource assessment. Attention to referral sources and capacity strengthening is relevant to understanding of multisector collaboration to effectively influence health care and health outcomes. Social and environmental determinants of health are identified as a domain in both the Global Health Competencies and the Interprofessional Global Health Competencies, whereas in the Quad Council Competencies social and ecological determinants of health is a competency in Domain 4:

Cultural Competency Skills. This placement might not support the emphasis on social and environmental determinants of health as explicitly as in the other competencies.

Recommendations. Recommendations include the following.

1. Increase emphasis on travel, displacement, and globalization of health and health care.
2. Increase focus of practice on low-income populations, migrants, refugees, and the displaced.
3. Emphasize the stages of the referral process and community resource assessment.
4. Highlight the nurse's role in capacity building/strengthening and advocacy for low-income populations.
5. Strengthen the capacity to understand and participate in multisector collaboration.
6. Increase emphasis on the social and ecological determinants of health that influence access and quality of care. Consider an additional domain.

Domain 5: Community Dimensions of Practice Skills. The C/PHN functions as a partner with key stakeholders and as a member of a community-based participatory research team. These are primary activities that effectively facilitate community involvement, which affects health outcomes. Use of an ecological perspective is foundational to the C/PHN expertise in health assessment, planning, and intervention. A working knowledge of community assets and resources with understanding of types of health care delivery systems (government, private, nonprofit) provides underpinnings for advocacy and population-focused opportunities.

Differences in Global Health Competencies. Differences in Global Health Competencies include the following.³

- **Domain 3: Social and Environmental Determinants of Health**
Describe the relationship between access to clean water, sanitation, and nutrition on individual and population health.
- **Domain 5: Health Care in Low-Resource Settings**
Demonstrate the ability to adapt clinical skills & practice in a resource-contained setting.
Identify clinical interventions & integrated strategies that have been demonstrated to substantially improve individual and/or population health in low resource settings.
Participate in training to prepare for courses in low resource settings outside of their home.

Differences in Interprofessional Global Health Competencies. Differences in Interprofessional Global Health Competencies include the following.¹⁸

- **Domain 3: Social and Environmental Determinants of Health**
Describe the relationship between access to and quality of water, sanitation, food, and air on the individual and population health
- **Domain 7: Professional Practice**
Demonstrate the ability to adapt clinical or discipline-specific skills and practice in a resource-contained setting.

Analysis summary Domain 5: Community Dimensions of Practice. Dimensions of practice provide the foundation for community and public health nursing practice. The emphasis on low-resource or resource-constrained settings is overt in the Global Health and Interprofessional Global Health Competencies. Discussion is needed regarding the following: Should clinical practicum in undergraduate nursing education focus more specifically on target populations that are underserved, uninsured, or lack access to care? Often settings for clinical experiences are used for learning development that do not adequately reflect health and social equity needs. What defines a low-resource setting for nursing clinical experiences? Do these types of settings exist in our own local communities, and are they appropriate for preparation of Level I/Tier 1 core competencies application? Population-focused advocacy is a competency within this domain. The American Nurses Association defines *advocacy* as “the act of pleading or arguing in favor of a cause, idea or policy on someone's behalf with the objective of developing community, system, individual or family capacity to plead their own cause or act on their behalf.”¹⁹ Although implied here and in Domain 1, the use of the terms *social justice* and *health equity* should be overt in the C/PHN competencies.

The delineation of water, sanitation, nutrition, and planetary health are not addressed as such in the Quad Council Competencies. The competency of using an ecological perspective addressed in this domain and the delineation of the identification of the determinants of health and illness in Domain 1: Analytic and Assessment Skills reflect the importance of these environmental variables in health. To partner with other countries, water, sanitation, nutrition, and planetary health must be emphasized in educational and service preparation.

Identifying and integrating clinical interventions and strategies that have been found to improve

health reflects the importance of the use of evidence-based practice interventions to guide student learning and community involvement. Faculty and community leaders must work collaboratively and in partnership to influence outcomes. Assigning more evidence-based projects in collaboration with our partners can facilitate positive and measurable population health outcomes. As an example, community-based participatory research has been specifically identified as a competency for Tier 1 Quad Council Competencies. Increased academic and service partnerships can provide a foundation for participatory research.

Recommendations. Recommendations include the following.

1. Increase emphasis on water, sanitation, nutrition, and planetary health as determinants of health.
2. Focus clinical experience in undergraduate nursing curricula on low-resource or resource-constrained settings.
3. Define appropriate types of nursing settings for community and public health nursing practice experiences.
4. Increase overt terminology related to social justice and health equity.
5. Incorporate the strategic plans of the local health agency and community health goals in clinical practice.
6. Prepare nursing faculty to take leadership roles in connecting and providing evaluation data to the local health agency through focused, evidence-based projects.

Domain 6: Public Health Sciences Skills. A C/PHN should use public health science skills. These skills include an understanding of the historical foundation of public health and public health nursing paradigms, the 3 public health core functions, and the 10 essential services of public health practice. Use of basic descriptive epidemiology, informatics, and other information technologies provides a foundation for interpreting research and identifying gaps in research evidence to guide practice. The nurse should comply with the ethical principles of research to use the scientific base of public health nursing practice.

Differences in Global Health Competencies. Differences in Global Health Competencies include the following.³

- **Domain 2: Health Implications of Migration, Travel & Displacement**
Demonstrate an understanding of risks imposed by international travel or foreign birth.

Recognize unusual diseases and presentation of common disease associate with international travel.

- **Domain 3: Social and Environmental Determinants of Health**

Describe the relationship between clean water, sanitation, food & air quality on individual and population health.

Describe the relationship between environmental degradation and human health.

- **Domain 5: Health Care in Low-Resource Settings**

Describe the role of syndromic management and clinical algorithms for treatment of common illnesses.

Describe the role of WHO in linking health & human rights, the Universal Declaration of Human Rights, International Ethical Guidelines for Biomedical Research & Declaration of Helsinki.

Differences in Interprofessional Global Health Competencies. Differences in Interprofessional Global Health Competencies include the following.¹⁸

- **Domain 3: Social & Environmental Determinants of Health**

Describe the relationship between access to and quality of water, sanitation, food, and air on the individual and population health.

- **Domain 4: Capacity Strengthening**

Identify methods for assuring program sustainability.

- **Domain 6: Ethics**

Apply fundamental principles of international standards for the protection of human subjects in diverse cultural settings.

- **Domain 8: Health Equity and Social Justice**

Apply social justice and human rights principles in addressing global health problems.

Demonstrate a basic understanding of the relationships between health, human rights and global inequities.

Describe role of WHO in linking health and human rights, the Universal Declaration of Human Rights, International Ethical Guidelines for Biomedical Research Involving human subjects.

- **Domain 10: Sociocultural and Political Awareness**

Describe the roles and relationships of the major entities influencing global health and development.

Analysis summary Domain 6: Public Health Science Skills. Public Health Science Skills in the global context are reflected and delineated by the terms *international travel, foreign birth, international standards for protection of subjects, and human rights principles for addressing global health and the global burden of disease.* Again, as in the analysis of Domain 5: Community Dimensions of Practice, the overt reference to clean water, sanitation, and environmental variables reflects more emphasis on environmental components of health in this domain. *Global health* is the consideration of health and disease from an international, worldwide, planetary perspective, and community

and public health nurses must have knowledge about global health issues and determinants.²⁷ The Quad Council Public Health Nursing Competencies lack adequate delineation of this entry-level, Tier 1 public health nursing essential.

Recommendations. Recommendations include the following.

1. Increase attention to health equity and social justice.
2. Emphasize planetary health variables contributing to the global burden of disease.
3. Increase content and focus on faculty roles and practice for sustainability.
4. Incorporate international standards for the protection of participants (subjects) and human rights principles for addressing global health and the global burden of disease.

Domain 7: Financial Management and Planning Skills. A C/PHN should be able to describe the structure, function, and jurisdictional authority and the interrelationships among local, state, tribal, and federal health care systems. The impact of budget constraints should be described and the nurse should be able to provide data for inclusion in programmatic budgets and budget priorities. Funding from external sources and the ability to provide fiscal narrative components of proposals are important for sustainability. Skills are related to development and implementation of an evaluation plan and use of evaluation data to make adaptations. Specific skills identified in relation to management include resource utilization, public health informatics, and budget, evaluation, and conflict management skills with the goal to deliver care within budgetary guidelines, which include sustainability of public health interventions.

Differences in Global Health Competencies. Differences in Global Health Competencies include the following.³

- Domain 1: *Global Burden of Disease*
Discuss priority setting, health care rationing and funding for health and health related research.
- Domain 4: *Globalization of Health and Health Care*
Analyze how global trends in health care practice, commerce, and culture, multinational agreements, and multinational organizations contribute to the quality and availability of health and health care locally and internationally.

Differences in Interprofessional Global Health Competencies. Differences in Interprofessional Global Health Competencies include the following.¹⁸

• Domain 11: *Strategic Analysis*

Strategic analysis is the ability to use systems thinking to analyze a diverse range of complex and interrelated factors shaping health trends to formulate programs at the local, national, and international levels.

Conduct a community health needs assessment.

Conduct a situational analysis.

Design context-specific health interventions based on a situation analysis.

Analysis summary Domain 7: Financial Management and Planning Skills. Financial management and planning skills are supported by the Global Health and Interprofessional Global Health Competencies. The interdisciplinary language of a community health needs assessment does not specifically address public health nursing competencies. Although Domain 1 does include community-based assessment as a competency, it does not include the learning needs assessments addressed in the Global Health Competencies. *Situational analysis* is a new term that reflects the need for critical analysis and critical thinking, which is reflected in Domain 3: Communication Skills. Community and public health nursing textbooks delineate content related to a needs assessment and a community health assessment, which together form the context-specific assessment for interventions. Consideration needs to be given to an increased emphasis on financial management analysis and planning in community and public health nursing education.

Recommendations. Recommendations include the following.

1. Incorporate introductory global burden of disease content in undergraduate nursing curriculum related to existing financial management and planning learning activities.
2. Knowledge of financial management and planning skills are important and relevant for the undergraduate nursing student to support local, national, and global health activities.

Domain 8: Leadership and System Thinking Skills. A C/PHN should incorporate ethical standards of practice, systems theory, and quality improvement initiatives into practice. These include ethical, legal, and policy guidelines addressed in Domain 1 and the ethical requirements of research addressed in Domain 6. The nurse should identify internal and external factors and participate with stakeholders to identify vision, values, and principles for community action. A key leadership ability is to use individual, team, and organizational learning

opportunities for professional development, which exhibits a personal commitment to lifelong learning and knowledge of current public health laws and policies.

Differences in Global Health Competencies. Differences in Global Health Competencies include the following.³

- Domain 4: *Globalization of Health and Health Care*
Analyze how global trends in health care practice, commerce & culture, multinational agreements, and multinational organizations contribute to the quality and availability of health & health care locally and internationally. Analyze how travel and trade contribute to the spread of communicable & chronic disease.
- Domain 6: *Health as a Human Right and Development Resource*
Demonstrate a basic understanding of the relationship between health and human rights. Demonstrate familiarity with organizations and agreements that address human rights in health care and medical research.

Differences in Interprofessional Global Health Competencies. Differences in Interprofessional Global Health Competencies include the following.¹⁸

- Domain 2: *Globalization of Health and Health Care*
Describe how global trends in health care practice, commerce and culture, multinational agreements and multinational organizations contribute to the quality and availability of health and health care locally and internationally.
- Domain 5: *Collaboration, Partnering, Communication*
Acknowledge one's limitation in skills, knowledge and abilities. Apply leadership practices that support collaborative practice and team effectiveness.
- Domain 8: *Health Equity and Social Justice*
Demonstrate a commitment to social responsibility.

Analysis Summary Domain 8: Leadership and System Thinking Skills. *Leadership and System Thinking Skills is reflected more broadly in the Global Health Competencies and Interprofessional Competencies than in the Competencies for Public Health Nurses. A question to be considered for curriculum evaluation is: Is nursing education providing an adequate foundation for systems thinking and international practice? There is lack of evidence in the Quad Council Competencies to support teaching related to health implications of travel, trade, and work with multinational organizations.*

Recommendations. Recommendations include the following.

1. Increase content related to the work of multinational, binational, and national organizations.

2. Incorporate influences of travel and trade on health and diseases.
3. Reinforce health equity and social justice as a competency of community and public health nursing practice.
4. Encourage multisector collaboration in program planning and intervention.
5. Increase the role of citizenship as a nursing responsibility.

CONCLUSIONS

Competencies and competency-based education provide the foundation and structure for community and public health practice. Competencies enrich public health concepts and principles and influence health outcomes. This comparative analysis provides information regarding similarities, differences, gaps, and recommendations across 3 sets of competencies that guide public health nursing practice in global settings: Quad Council Competencies for Public Health Nursing, Global Health Competencies, and Interprofessional Global Health Competencies. Differences in concepts and terminology among various disciplines need further discussion, clarification, and analysis to further promote interdisciplinary work and multisector collaboration for community and public health nursing practice.

Although the Essentials of Baccalaureate Nursing Education for Entry-Level Community/Public Health Nursing outline assumptions and concepts for community and public health nursing education, the Quad Council Competencies for Public Health Nurses do not delineate these assumptions for generalist practice.^{17,28} Concepts that need further delineation include international or global health; global burden of disease; health equity and social justice; implications of practice in marginalized and low-resource settings; impact of environment and planetary health; health implications of refugees, migrants, and the displaced; strategic analysis; coordinating with multisector teams; and the nurse's role in community capacity building and advocacy. Recommendations within each of the domains may appear redundant, suggesting the need for integration of these concepts across domains.

Population health involves applying health strategies, interventions and policies focused at the population level rather than at the individual level.¹ Knowledge of planetary health, particularly water, sanitation, nutrition, and the built environment, must be integral components of assessment and analytical skills for global health practice locally and abroad.²⁹

In summary, increased emphasis on a global perspective will enhance curricula, clinical practicum planning, and implementation both locally and globally.³⁰ Consistent emphasis on population health, global health, and interprofessional content throughout nursing curriculum should be evident in curriculum evaluation that reflects the 2008 Essentials of Baccalaureate Education for Professional Nursing Practice.⁵ Baccalaureate nursing education needs to improve and standardize competencies and skills that reflect community as client. Work needs to continue on the revision of competencies for public health nursing practice to enhance productive contributions to community health outcomes. This work needs to include consideration of proper placement of these content gaps within basic and advanced nursing education as well as leveling for C/PH nursing practice. In the interim, a

special course or elective may be appropriate, especially for schools having clinical community and public health nursing practicums in international settings. Clinical evaluation in low-resource settings needs to be enhanced and aligned with competencies. In conclusion, preparing nurses for more robust roles in population health would require the following:

1. Increased awareness and use of public health nursing competencies to standardize practice, education, and improve measurement of population health care outcomes.
2. Revising the 2011 Quad Council Public Health Nursing competencies.
3. Designing a thematic approach for population and global health within nursing education.
4. Using a standardized clinical evaluation tool to address current gaps in practice, education, and research.

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