

A Systematic Review of Conceptual and Competency Contents of Baccalaureate Global Nursing Education in Countries for Referring Further Development in Japan

Chieri Yamada¹, Megumi Nagamine², Takashi Ohue³, Hiromi Tsujimura⁴, Yoshie Mori⁵

¹Professor, Graduate School of Medicine, Fukushima Medical University, Japan, ²Assistant Professor, Faculty of Health Sciences, Gunma Paz University, Japan, ³Associate Professor, Department of Nursing, Faculty of Nursing, Hyogo University, Japan, ⁴Associate Professor, Graduate School of Health Sciences, Gunma University, Japan, ⁵Professor, Graduate School of Health Sciences, Gunma University, Japan

Abstract

Objective: To facilitate discussions of the contents of global nursing education programs in Japan, a systematic review of related articles in other countries was conducted.

Review Method: This review was implemented using the PRISMA guidelines. Online databases of PubMed, Cochrane Library, CINAHL with full text, and National Center for Biotechnology Information were studied. A systematic literature review was conducted of the databases' articles written in English by using the keywords "global/international nursing education" and "undergraduate course." Research-appropriate articles by titles and abstracts were selected and full texts of these articles were obtained. The authors read all the full texts, choose those appropriate to the research objective and synthesized the data.

Results: Out of eight articles that were identified, three demonstrated sets of domains with competencies. The three articles included almost all domains in the remaining five, and the essential domains were categorized such as global burden of diseases, socio-environmental health issues, and human rights and social justice. Some concepts (e.g., social justice) have not been included in official announcements in Japan.

Conclusions: Six categories of domains with competencies seemed comprehensive, and shall be a base of discussion for further development of the subject education in Japan as well as for any nursing institute in the world.

Key words: *baccalaureate course, concepts, competencies, global nursing education, systematic review*

Corresponding author:

Chieri Yamada, Professor, Graduate School of Medicine, Fukushima Medical University, Japan.
3-9-45 Minami-Odori, Morioka, 020-0874, Japan.
Email: cyamada-hsph@hotmail.com

Introduction

Despite a long history of nursing education in Japan, the first official inclusion of global nursing in nursing education occurred relatively recently, and the globalization and nursing category was added to the

national nursing licensure exam questions standards (NNLEQS) by (Ministry of Health, Labor and Welfare (MHLW) in 2009¹. The MHLW completed the global nursing education contents with sub-categories and codes in 2013–2017² (Table 1).

Table 1: Contents of Globalization and Nursing Category (Ministry of Health, Labor and Welfare, Japan, 2017)

Sub-category	Code
Viewpoint of globalization in nursing	<ul style="list-style-type: none"> a. Globalization and world health goals b. Globalization and human security c. Health inequity among countries and regions d. Roles of Japan in global health e. Nursing systems in world nations
Nursing target populations in global settings	<ul style="list-style-type: none"> a. Foreign residents b. Japanese residing abroad c. Returned Japanese from overseas d. People, regions, and organizations that need international cooperation activities
Multi-cultures and nursing	<ul style="list-style-type: none"> a. Nursing sensitivity to cultures b. Health issues of foreign residents and nursing
International cooperation and nursing	<ul style="list-style-type: none"> a. Roles of international organizations b. Roles of engaged nurses in international cooperation c. Assistance for developing countries through Official Development Assistant Scheme

Every nursing student in three-year vocational nursing institutes under the MHLW's jurisdiction or in four-year colleges under the jurisdiction of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) takes the national licensure exam. Although the three-year institutes are in compliance with the NNLEQS, the nursing colleges have been expected to develop an autonomous curriculum based on the MEXT's Baccalaureate Nursing Education Model Core Curriculum³, which includes global nursing in three out of seven categories, in addition to being in compliance with the NNLSQS.

In addition to discussing how to assist global nursing educators, the authors sought to answer fundamental questions, including whether officially indicated educational contents of the global nursing encompassed all essentials and whether we have concrete indicators of educational outcomes for each essential. No report on or discussion of those issues was found, although some research has reported on a limited number of faculty with expertise in the subject due to broad fields that global nursing covers and low interest among students⁴⁻⁶.

In this study, we aim to utilize essential domains and competencies to comprehend global nursing education in other countries through a systematic literature review in order to develop a consensus on global nursing education contents in Japan.

Materials and Methods

We followed the Preferred Reporting Items for Systematic Review and Meta-Analysis protocols (PRISMA-P)⁷.

Search Strategy

The authors used online databases in English available in their schools in Japan, including PubMed, Cochrane Library, and CINAHL with full text. As this study focused on conceptual dimensions in nursing education, national or board ideology for undergraduate global nursing education in some countries was also searched online.

Several steps were followed. First, we explored appropriate combinations of search terms, such as global/international nursing education, undergraduate course in PubMed. We then collected information on articles with the appropriate terms from the above mentioned three databases. We listed the nursing journals from journals referenced in the National Center for Biotechnology Information databases through PubMed, selected the journals online, and collected articles with the appropriate terms through each journal’s portal. Second, we selected research-appropriate articles by titles and abstracts

and obtained full texts of these articles from the internet or hard copies from other schools in Japan. We collected national or board ideology documents for undergraduate global nursing education from the internet. We read the full texts of the articles and documents and choose those appropriate to the research objective. Finally, we synthesized the data.

Inclusion and Exclusion Criteria

Articles were included if they met the following criteria: (a) were written in the English language; (b) were peer-reviewed journal articles; (c) described comprehensive domains, perspectives, concepts, or competency at individual instituted or in aggregate; and (d) were published between 2000 and August 2020. We chose these two decades for the study because this period produced many more articles in PubMed than prior to 2000.

The exclusion criteria were content that did not relate to undergraduate nursing education essentials, activity reports for improving global nursing lecture/practicum skills of faculty, and reports of nursing practicum in global nursing.

Search Outcomes

After we applied different combinations of search teams, the PubMed database yielded two candidates: “global/international nursing education, undergraduate” and “global/international nursing education, undergraduate course” (Table 2).

Table 2: Article Numbers by Search Terms in PubMed

Search Terms	Articles
a. Global/international nursing education, undergraduate	Global - 264 International - 271
b. Global/international nursing education, undergraduate course	Global - 54 International - 56

We selected b. as the terms as a. articles included all of b. articles along with other nursing articles not related to nursing education. The authors applied the terms to Cochrane Library and CINAHL with full text; however, neither database returned appropriate articles. Of the 110 articles included in Table 2, 98 remained after the removal of duplicates.

Nine of the 73 online nursing journals identified in the NCBI Databases—Advances in Nursing Science, International Journal of Nursing Education Scholarship, Journal of Advanced Nursing, Journal of Nursing Education, Journal of Nursing Education and Practices, Journal of Professional Nursing, Nursing Educator, Nursing Education Perspectives, and Nursing Education Today—returned 3,388 articles with the terms. The articles were excluded by screening the title and abstract.

In terms of national or board announcements for baccalaureate global nursing education, three countries' documents were retrieved through the internet: American Association of Colleges of Nursing⁸(AACN), Nursing and Midwifery Council in UK⁹, and Canadian Association of Schools of Nursing¹⁰. Only the AACN described competencies for global nursing, which were published in an academic article; therefore, we included not the AACN announcement but rather the article for analysis. Finally, eight articles were identified as meeting inclusion of this review.

Findings

We included eight articles and described their consideration of the essentials of global nursing education: a. Carlton KH, et al.¹¹; Calvillo E, et al.¹²; Wilson L, et al.¹³; MacNeil J, Ryan M.¹⁴; Veras M, et al.¹⁵; Jogerst K, et al.¹⁶; Wilson L, et al.¹⁷; Torres-Alzate HM, et al.¹⁸.

The terms used in these articles varied and included competencies, domains, cultural competencies, concepts, and themes. Regardless of what terms the authors used, there were broader conceptual categories and concrete abilities under each of those categories. We entitled the former “domain” and the latter “competency” in this study.

To understand each content of the eight articles, we listed domains in three categories: fields for global health; competency, attitudes, values, and perspectives expected of nursing students learning global health; and competency, attitudes, values, and perspectives expected of all nursing students. Each category indicated several domains in more than two articles. The first category included global disease conditions; social and environmental issues, health as a right, social justice, equity, and health disparity; health implications of migration, travel, and displacement; globalization of health and healthcare. The second category included cultural competence, humanistic, holistic care. The third category included collaboration, partnership, and communication. Domains appearing repeatedly might represent a common ideology for global nursing among the articles' authors.

Finally, the authors focused on three of the eight articles that clearly indicated domains, with concrete competencies for each domain, and also included the previously mentioned domains. Table 3 shows the six categories of the aggregated domains in the three articles: global burden of disease; health issues along with globalization; social and environmental determinants of health; human rights, health equity, social justice, and ethics; nursing for populations in low-income countries; and professional development as global health nurses and human beings. Table 3

does not list the competencies for each domain, but does include some keywords used to assist in understanding domains' competencies.

Table 3: Integrated Categories of Global Nursing Domains in Three Articles

Article title and Category	Global health competencies for nurses in the Americas (2012)	Identifying Interprofessional Global Health Competencies for 21st-Century Health Professionals (2015)	Essential global health competencies for baccalaureate nursing students in the United States, A mixed methods Delphi study (2020)
Global burden of disease	Global burden of disease (keywords: major causes of morbidity and mortality, regional risk of diseases)	Global burden of disease (keywords: morbidity, mortality, country group with income-classification, health disparity)	Global burden of disease (keywords: morbidity, disability, mortality, health disparities, SDGs)
Health issues and healthcare in globalization	Health implications of migration, travel, and displacement (keywords: risk by international travel or foreign birth, cultural context and sensitiveness)	Globalization of health and healthcare (keywords: travel, trade, spread communicable diseases)	Health implications of pandemics, displacement, wars, disasters, and travel (keywords: risk of international travel, migration, displacement, disasters)
	Globalization of health and healthcare (keywords: changing disease patterns, availability and shortage of healthcare workers)		Global nursing and healthcare (keywords: healthcare provision, healthcare workers and availability and shortage, roles of nurses in global setting)
			Culturally competent, humanistic and holistic care (keywords: cultural sensitiveness, respect, cultural humility understanding)
Social and environmental determinants of health	Social and environmental determinants of health (keywords: poverty, education, lifestyle, life expectancy, income level, clean water, sanitation, food, air)	Social and environmental determinants of health (keywords: social, economic, environmental factors on well-being)	Social and environmental determinations of planetary health (keywords: poverty, race, education, lifestyle, life expectancy, clean water, sanitation, food, air)

Cont... Table 3: Integrated Categories of Global Nursing Domains in Three Articles

Human rights, health equity, social justice, and ethics	Health as a human right and development resource (keywords: human right as individual and population health)	Health equity and social justice (keywords: health disparities, global inequity)	Ethical issues, equity, and social justice in global health (keywords: human rights and health, WHO roles and declarations, commitment)
		Ethics (keywords: working with diverse economic, political and cultural contexts)	
Nursing for populations in low-resource countries	Health care in low-resource settings (keywords: high- and low-resource differences, cultural and ethical issues)	Professional practice (keywords: articulate barriers, health in low-resource settings)	Leadership, management, and advocacy (keywords: community engagement, advocate health improvement of vulnerable population, active participation on health improving activities)
Professional development as global health nurses		Collaboration, partnership, and communication (keywords: stakeholders, open dialogue)	Collaboration and partnership (keywords: healthcare team, leadership skills, communication, relationship building)
		Sociocultural and political awareness (keywords: basics for working with diverse cultural settings)	Communication (keywords: confronting language barrier, understanding team members' role and responsibility)

Discussion

As global nursing educators, the authors recognized the importance of all domains presented in the eight articles and identified several domains more frequently described over the years that might be essential. Focused on these domains, the authors considered three articles that embodied the essentials and indicated concrete competencies for each domain that could be utilized for the discussion of educational achievement objectives.

Wilson et al.¹³ analyzed the perception of 30 global health competencies under six domains among faculties in 16 countries. All competencies demonstrated high acceptance among the faculties

and high internal consistency for reliability in English-speaking and Spanish-speaking faculties. Using participants' comments, the authors described how to incorporate these competencies into existing courses rather than setting a new subject of global nursing as well as the need for different sets of global nursing competencies at different levels (e.g., undergraduate and graduate).

Jogert et al.¹⁶ developed a list of global health competencies for health professionals, including nurses. Their list included domains and competencies at two levels and the study reviewed the list for the global citizen level in order to be applicable to undergraduate students. The list demonstrated a set of

core realms over different professional disciplines.

Torres-Alzate et al.¹⁸ conducted a three-phase study with nurse faculties who were experts in global health to identify competencies in global health for undergraduate students in the United States. The experts strongly agreed on 40 competencies in nine domains. It indicated that competencies were conceptually concrete; some were tangible and could provide educational approach implications as well as achievement objects.

Comparison and Clarified Characteristics of the Contents in Japan

By reviewing global nursing educational contents for the NNLEQS in Japan (Table 1) to compare them with the results in the identified domains, the authors found a fundamental difference: Japanese global nursing does not yet seem to stand on genuine globalism. There is a “we” versus “they” perception (e.g., Japanese versus other people; Japanese culture versus other cultures). The selected eight articles did not include such a distinction. The authors have no intention of disagreeing with the contents in Table 1, which imply a particular background of Japanese society and nursing education.

In light of this point, the majority of clinical nurses and even nursing faculties, especially in rural areas, may not have experience caring for non-Japanese patients. The mean of annual foreign patients was four among 4,097 participating hospitals in 2020²⁰. Although travelers to Japan have been decreasing due to COVID-19, even prior to the pandemic nursing reports or communication regarding nursing care for overseas visitors or foreign residents were limited. Apparently experienced global nursing faculties are insufficient. Eighty-five percent of studied nursing

institutes nationwide that offer the global nursing subject depend on nurses who have global nursing experience as part-time lecturers²¹.

In addition, compared to the studied contents, Japanese global nursing contents emphasize understanding international cooperation, national and international related organizations, and nurses’ roles in global health. The historical implementation of global nursing as technical cooperation with other nations’ nurses and communities after World War II has been the main global nursing activity for decades. Therefore, the authors considered the emphasis placed on such contents.

Regarding the extracted essential domains, the main difference with Japanese contents was the term “social justice.” Respect for human rights, ethics, and inequity were mentioned in general nursing and global nursing realms of the MEXT model; however, social justice involved broader and deeper concepts related to societal roles due to both individuals’ and nurses’ disparity of wealth, opportunity, and privilege, which might lead to disadvantages in health services, education, and welfare, among other areas. The concept of social justice might bring a greater understanding of holistic nursing care to nursing students than learning rights and ethics individually.

The reviewed articles showed a transition in global nursing educational domains. Many studies and discussions have been developed over the decades, involving broader organizations/participants from different countries, which seemed efficient for deliberating on the essential contents. Torres-Alzate et al.¹⁸ suggested that their study results could be utilized to identify competencies across any profession. The essential domains could form a sufficient discussion base for conceptual framework development in Japan.

Having global nursing as an independent subject or incorporating it into related subjects should be discussed in greater details. Baccalaureate nursing institutes are expected to develop a curriculum based on the MEXT demonstrated model, which thoroughly integrates global nursing. Only 12% of the studied 90 baccalaureate nursing institutes in Japan have incorporated global nursing into existing subjects, such as fundamental nursing or public health nursing⁴. This might be due to global nursing being a newly introduced subject, although several domains in Table 3 imply that incorporating this area into the curriculum is appropriate. Dawson et al.²² reported a process to address global nursing competencies in selected courses across the curriculum without creating additional work for faculties but still enhancing global perspectives. One report found that integrating cultural competence into the curriculum improved students' self-recognition of cultural competence²³.

Limitations

The limitations of this review include that only English articles were considered due to the limited language ability of the authors. Databases within the authors' institutes and full texts or hard copies (when not able to download texts from the internet) were also limited.

Conclusion

This review analyzed essential domains related to global nursing education for baccalaureate students. These domains were categorized as the global burden of disease, health issues and healthcare in globalization, social and environmental determinants of health, human rights, health equity, social justice, and ethics, nursing for populations in low-resource countries, and professional development as global health nurses. Current contents of global nursing

education in Japan do not contain all of these domains; however, the reasons and particular backgrounds were also clarified. A series of discussions were considered to develop a consensus based on the findings and indicated that global nursing faculties and experts in Japan should produce qualified global nursing education. The findings might be applicable to any nursing institutes in all countries. Institutes need to develop their own global nursing education courses based on their background and concepts with domains as realms, competencies as measurable learning outcomes, and evaluation methods to measure their progress.

Conflict of Interest: The authors declare no conflict of interest.

Source of Funding: This research was funded by Japan Society for the Promotion of Science KAKENHI Grant Number 20K10612.

Ethical Clearance: This article is a literature review hence it's not required an ethical clearance.

References

1. Ministry of Health, Labour and Welfare, Japan. 2010 nen kokka kangoshisi shiken shutudai kijun [2010 National nursing exam questions standards]. 2017 [cited 2020 September 20]. Available from: <https://www.mhlw.go.jp/topics/2009/04/dl/tp0413-1f.pdf>. No English available.
2. Ministry of Health, Labour and Welfare, Japan. Kangoshi kokka shaken shutsudai kijun [National nursing exam questions standards]. 2010 [cited 2020 September 20]. Available from: <https://www.mhlw.go.jp/file/04-Houdouhappyou-10803000-Iseikyoku-Ijika/0000158947.pdf>. No English available.

3. Ministry of Education, Culture, Sports, Science and Technology, Japan. Model Core Curriculum for Nursing Education in Japan: Learning objectives aiming for acquiring “core abilities of nursing practice in bachelor’s degree program”. 2018 [cited 2020 September 20]. Available from: https://www.mext.go.jp/content/20200428-mxt_igaku1217788_4.p.pdf. No English available.
4. Hiruta Y, Kubo N, & Yamanouchi Y. Kiso kangogaku kyoiku ni okeru kokusai kannogogaku no kyouiku puroguramu no kaihatu ni kannsuru kennkyuu -Waga kuni no daigaku kannogogakka ni okeru kokusai kango kyouiku no jittai [A study on design of education program of the international nursing science in basic nursing education system: the present status of the international nursing education in the department of nursing in university in Japan]. *Hachinohe Gakuin Institutional Bulletin*. 2017; 54: 39-54. No English available.
5. Kato Y. The Current Situation and Challenges of Short-term Study Overseas Training Programs at Faculties of Nursing. *Ishikawa Journal of Nursing*. 2020; 17: 1-10. Available from: <http://id.nii.ac.jp/1301/00000253/> English abstract is available.
6. Nakagoshi R, Mori K, Tanaka Y, Nomura A, & Joho T. Waga kuni no kiso kango kyoiku ni okeru kokusai kanngo kyouiku no genjo to kadai [Current status and issues of global nursing in undergraduate course in Japan]. *Bulleting of Ehime Prefectural University of Health Sciences*. 2014; 11 (1): 9-13. No English available.
7. PRISMA for systematic review protocols (PRISMA-P). Transparent Reporting of Systematic Reviews and Meta-Analysis. Available from: <https://www.prisma-statement.org/Extensions/Protocols>.
8. American Association of Colleges of Nursing. The Essentials of Baccalaureate Education for Professional Nursing Practice. 2008. [cited 2020 August 18]. Available from: <https://www.aacnnursing.org/Portals/42/Publications/BaccEssentials08.pdf> (aacnnursing.org)
9. Nursing & Midwifery Council (UK). Standards for pre-registration nursing Programmes. 2018. [cited 2020 September 30]. Available from: <https://www.nmc.org.uk/standards/standards-for-nurses/standards-for-pre-registration-nursing-programmes/>
10. Canadian Association of Schools of Nursing. National Nursing Education Framework Final Report. 2015. [cited 2020 October 10]. Available form: <https://www.casn.ca/wp-content/uploads/2014/12/Framwork-FINAL-SB-Nov-30-20151.pdf>
11. Carlton KH, et al. Integration of Global Health Concepts in Nursing Curricula: A national study. *Nurs. Educ. Perspect*. 2008; 28 (3): 124-129.
12. Calvillo E, et al. Cultural Competency in Baccalaureate Nursing Education. *J Transcult Nurs*. 2009; 29 (2): 137-145.
13. Wilson L, Mendes IAC, Klopper H, Catrambone C, Al-Maaitah R, Norton ME, et al. Global health competencies for nurses in the Americas. *J Prof Nurs*. 2012; 28(4): 213-333.
14. MacNeil J, Ryan M. Enacting global health in the nursing classroom. *Nurse Educ Today*. 2013; 33: 1279-1281.
15. Veras M, et al. Reliability and validity of a new survey to assess global health competencies of health professional. *Glob J Health Sci*. 2013; 5 (1): 13-27.

16. Jogerst K, Adams V, Evert J, Fields E, Hall T, Olsen J, et al. Identifying interprofessional Global Health Competencies for 21st-Century Health Professionals. *Annals of Global Health*. 2015; 81(2): 239-247.
17. Wilson L, 'Global health' and 'global nursing': proposed definitions from The Global Advisory Panel on the Future of Nursing. *J Adv Nurs*. 2016;72(7): 1529-1540.
18. Torres-Alzate HM, Wilson LL, Harper DC, Ivankova NV, Heaton K, & Shirey MR. Essential global health competencies for baccalaureate nursing students in the United States: A mixed methods Delphi study. *J Ad. Nurs*. 2020; 76: 725-740.
19. Ministry of Health, Labour, and Welfare. A status report of acceptance of foreign patients by hospitals in 2020. [cited 2021 March 21]. Available from: <https://www.mhlw.go.jp/content/10800000/000783797.pdf>. No English available.
20. Nagamine M, Oohue T, Tsujimura H, Mori Y, & Yamada C. Survey of what is required to be strengthened in international nursing education. *Journal of Japanese Society for International Nursing*. 2021; 5 (1): 71. English abstract available.
21. Kelly T, Lazenby M. Developing and validating learning domains, competencies, and evaluation items for global health clinical immersion practicum for graduate-level nursing. *J Adv Nurs*. 2019; 75: 234-252.
22. Dawson M, Gakumo LA, Wilson LL. Process for mapping global health competencies in undergraduate and graduate nursing curricula. *Nurse Educ*. 2016; 41 (1): 37-40.
23. Caffrey RA, Nearnde, W, Markle D, Stewart B. Improving the Cultural Competence of Nursing Students: Results of Integrating Cultural Content in the Curriculum and an International Immersion Experience. *J Nurs. Educ*. 2005; 38: 234-240.