

Clinical Report

An international fieldwork program in Sub-Saharan Africa for Japanese nursing students to learn intercultural competence for healthcare support

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Introduction

The global population is growing continuously, particularly in developing countries without advanced social infrastructure.^{1) 4)} Although the amount of service provided depends on the size of the aging population, industrialized countries with slower population growth offer citizens numerous opportunities to access various social services, including health care.⁴⁻⁶⁾ This non-uniform increase in the population causes global economic inequality, and the resulting medical needs in developing countries, which are often considerable, may be ignored^{5) 7)}; in such countries, personnel shortage attributed to health-worker migration is one of the main concerns.^{1) 4)} International cooperative support from non-governmental organizations, including academic institutions, is needed to solve these problems.

The role of nurses, the largest workforce in the field of health care¹⁾, has expanded from providing comfort care to postsurgical patients or those with incurable diseases, to participating in clinical research and advanced technology development.⁸⁾ Nurses are expected to show leadership in overcoming health care challenges in developing economies³⁾ and identify their responsibilities as global health diplomats.²⁾ Thus, global nursing education must be promoted to give students more experience of the health practices in developing countries.^{1) 3) 7)}

Japan, currently categorized as a developed country, must learn intercultural competence in nursing care. Japan's National Health Care Insurance provides all citizens with access to advanced health care services. As a result, Japan's life

expectancy at birth is one of the highest, and increasingly better social services and more personnel are required to care for the growing population of elderly citizens.^{4) 6)} The development of a reliable home health care system and building more nursing schools are encouraged to meet the future demand, although the nursing shortage must still be solved. Another way to bring in new personnel may be the recruitment of non-Japanese people from other countries; individuals would receive training under the supervision of Japanese staff before beginning work.

Good teamwork between professionals from various cultural and language backgrounds is essential to enhanced performance in care.^{9) 10)} In multicultural societies such as the United States and Canada, intercultural competence training is recommended for the improvement of health professional skills.^{11) 12)} Understanding differences in social values requires time; therefore, comprehensive education is necessary for global nursing partnership. Although Japan is not considered a multicultural country, a diverse range of cultures, values, and traditions still exist in it, and the realization and acceptance of such values is required. Intercultural competence may be associated with good health care support for Japanese seniors.¹³⁾ In many Japanese nursing schools, global issues are gradually being incorporated into the curriculum¹⁴⁾; acquiring skills for culturally competent nursing care may be important not only for global cooperation but also to provide better healthcare for the aging population of Japan.

Liberal arts, such as the study of history, literature, and languages, are important to nursing education because these disciplines help students develop an understanding of the

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diversities of individual values and cultural backgrounds. Such education enhances novice nurses' ability to make appropriate decisions for a wider variety of patients when these nurses begin working in hospitals.^{8) 13)} The integration of the liberal arts, medicine, and nursing curricula could promote nurses' understanding of themselves and others and contribute to high-quality care.⁸⁾

To develop students' global perspectives, we conducted an international fieldwork program in a developing country with a health care situation somewhat similar to Japan's in the late 1940s. During that time, the Japanese were helped by international organizations, such as the World Bank and UNICEF, to recover from postwar poverty.¹⁵⁾ Education about health care support in developing countries is likely to be highly beneficial for Japanese nursing students, as they will learn about the history of modern medicine as currently performed in Japan, in addition to the significance of global aid.

We visited the Republic of Zambia to give students opportunities to learn about the healthcare system in another country. This was a trial program conducted for students in the Department of Nursing at the School of Medicine at Yokohama City University (YCU); the purpose was to give nursing students an opportunity to develop the intercultural competence necessary for health care support in foreign countries. Intercultural competence in this report is defined as "the ability of individuals to establish effective interpersonal and working relationships that supersede cultural differences".⁹⁾

Method

The fieldwork program gave nursing students the chance to experience a diverse culture and gain knowledge and skills for intercultural competence. The author had experience of mentoring a master's degree student from the Republic of Zambia at the YCU School of Medicine, which increased his interest in tropical medicine and health care support in developing countries. After the student's graduation, memorandum of understanding (MOU) was established between Schools of Medicine, The University of Zambia (UNZA) and YCU in 2012. During the visits to the Republic of Zambia for MOU, three health care sites were selected as appropriate for nursing students to experience the current health care infrastructure in a developing country, be exposed to health care support offered by Japan, and acquire intercultural competence: the Japanese International Cooperation Agency (JICA) project site, the University of Zambia (UNZA) School of Medicine, and Tokushima International Cooperation (TICO) health care project site. Information about the program was distributed to 3rd and 4th year students. Four 4th year students

were selected after interviews. Several meetings took place before departure, where a variety of safety issues were addressed, such as receiving infection prophylaxis vaccines, information about general health care issues in developing countries, and preparations for the students to give self-introduction in English to the faculty at the UNZA School of Medicine. There was only a short time for students who were less experienced in languages to improve their English. The students practiced introducing themselves several times before going abroad and again at the hotel in Zambia. The fieldwork was performed from March 4–10, 2013. The Republic of Zambia health data is shown in the table 1.¹⁶⁾

Time schedule of fieldwork program

Date	Time	Schedule
March 4 2013	22:00	Narita – Dubai
March 5	14:50	Dubai - Lusaka
March 6	AM, PM	JICA Zambia Office JICA project site (Lusaka) Chaminuka Lodge
March 7	AM, PM	UNZA School of Medicine, Teaching Hospital (UTH)
March 8	AM, PM	TICO Zambia Office TICO project site (Chibombo District) Lusaka Airport
March 9	05:00	Lusaka – Dubai
March 10	17:20	Dubai - Narita

At the project sites, explanations and discussions were led by healthcare specialists from JICA, TICO, and healthcare officers from the Zambian Ministry of Health (MOH). At UNZA, faculties were involved in the discussion of the student-exchange program.

To evaluate the program, students submitted comments after the fieldwork. Two students agreed to include their comments in this report. The progress of students in realizing and acquiring intercultural competence was evaluated by examining their experiences at the visited sites, including observation and communication with the people in the Republic of Zambia, and the students' comments.

Results

YCU students learned and experienced a great deal that they could not have in Japan.

1. JICA project site

The purpose of the visit to this site was to learn how JICA worked with people in the MOH and local community to provide health care support. We visited the health center at the JICA project site (The Project for Strengthening Community-based Child Health Promotion Systems in Urban Areas), where health

check for children was performed regularly. Infant body weight is measured using a Salter hanging scale, and not by digital infant weighing scales usually used in developed countries such as Japan. Blood test to identify infection was conducted when necessary. The number of licensed health care staff was inadequate, and community health workers (CHWs) played important roles in meeting the medical needs of the community. The main responsibility of nurses and CHWs was infant growth monitoring and child health promotion (infant registration, weighing, nutrition, immunization, health education and counseling, and home visits). The students were able to understand these health care procedures because the basic protocol was the same as in Japan, although the medical equipment available at the sites was slightly dated.

A health care officer from the MOH explained the challenges of organizing and maintaining the health center; several issues that usually occur in health facilities, particularly in rural areas, such as inadequate distribution of health care infrastructure and shortage of medical personnel. The JICA programs are scheduled to end in 2014; at that time, the center is expected to become financially independent, which might allow the maintenance of personnel infrastructure at steady levels. Two small-scale factories were opened for income generation activities. One makes corn flour, which is used to make the Zambian staple food, nshima, and the other factory makes bricks for construction. Part of the profit from the factories supports the CHWs, which could generate another problem in the future: income inequality across individual CHWs, which might result in community divisiveness. Therefore, transparency and accountability in the budget process is critical. The JICA project site showed students the economic and cultural elements of this country, including the struggle to protect children from common diseases in local communities. The experience might help students realize the value of providing health care support in developing countries.

A lunch was served to the visitors from YCU, but eating utensils were not provided. Students ate the food with their hands comfortably. After lunch, health care workers gradually began to interact with the students. Although it was difficult for the students to understand health care workers' African-accented English and to respond in English, friendly communication developed. When leaving the project site, the CHWs smiled and shook hands with students.

2. The University of Zambia (UNZA) School of Medicine and UNZA Teaching Hospital (UTH)

The purpose of visiting this facility was to learn about the medical infrastructure at the main general hospital in Zambia and to communicate with the UNZA faculty. UTH, the largest

medical institute in Zambia, has more than 1,600 beds and the facilities necessary for training specialists although hospital equipment might be slightly dated. A UTH tour was conducted by a designated UNZA faculty although the tour was unfortunately not able to cover to all the departments. After the tour, students had the opportunity to introduce themselves in English. When the students introduced themselves, they were able to pronounce most of the words in English correctly; however, more English language instruction may be necessary before future visits abroad, as it was hard for the students to understand the UNZA faculty. It may be pertinent for the UNZA faculties to realize that YCU students are trying to do their best to learn from a different culture. This was the first time students introduced themselves to non-Japanese people in English. This experience helped them improve their communication skills with people from another culture. The UNZA faculty introduced YCU students to their students at the School of Nursing Science. Further student communication between the two universities was proposed by UNZA.

3. Tokushima International Cooperation (TICO) project site

The purpose of the visit was to learn how the TICO, a Japanese non-profit organization (NPO), carried out health care support in the Republic of Zambia. TICO has offered health care support in Zambia for more than 15 years. We visited their project site in the Chibombo District, located near a small village that is a two-hour drive from downtown Lusaka City. After exiting the Great North Road, the major road in the Republic of Zambia, we occasionally came across small groups of people walking along the road, although it was rough and barely paved and no public transportation was available. The health post in the project site was closed because of a National Holiday (International Women's Day), but TICO's staff gave us a tour to explain the clinic, medical equipment, and the recently built childbirth area (photo). The health post was difficult to reach for



many patients living in the neighborhood because walking is the only mode of transportation. This health post is the only one in the area that provides health care services and medical screening for emergencies. It was a good opportunity for students to understand the difficulties faced by patients in this community, which are very different from those faced by patients in Japan.

4. Summary of the YCU students' comments

Student A

"It is impressive to know that many Japanese people are working in African countries, such as the Republic of Zambia, and providing health care support for people suffering because of inadequate social infrastructure. In the JICA and TICO project sites, I learned about the health care support provided by dedicated Japanese specialists and the importance of a health center/post run by the local community. My visit to the Republic of Zambia made me realize the present status of the economy and health care infrastructure in this country. Economic issues seemed to be associated with inconsistencies in the provision of social welfare services. On one hand, facilities and qualities necessary for urban life are being developed in the downtown area of Lusaka City. On the other hand, smaller communities were scattered across a wider area outside the capital city, and patients had to walk long distances to reach a clinic. I saw a person who came to the health post by bicycling for 45 minutes from his house. One of the purposes for the JICA project is to make the health post independent financially through management of the community. My experience in this fieldwork program helped me to understand how difficult it is to provide health care support in general. The development of modernized infrastructure might not be good enough. Instead, knowing and understanding the customs and values of the local community will be critical for successful healthcare support.

Student B

One of my interests in this fieldwork was how health care infrastructure works in the Republic of Zambia. As the JICA specialist pointed out, the personnel shortage was obvious in healthcare sites, including the JICA project site, although it was commendable that many community volunteers took part in the project to address the personnel shortage problem. I saw a CHW communicate with a mother who might not have full knowledge of infant nutrition using pictures. This experience made me understand how important health care support was for the whole community to protect people from diseases and malnutrition. A factory for nshima production was run as the community's business to generate money to keep the health care site financed and running. However, these established systems would be ruined without good local communication.

Financial support alone is not sufficient to create long-lasting beneficial outcomes. It is critical to study the community's customs, values, habits, rules of behavior, and culture, etc., to understand what would be the most successful means of generating meaningful communication. The health care support program should not be limited to clinical, environmental, and financial issues. The final goal of the program should be the development of a sustainable community, whose required social infrastructure (healthcare, physical, environmental, and economic) can be managed locally without outside assistance.

Discussion

In this program, YCU nursing students learned a great deal regarding health care support in developing countries in a short period (4 days). Most importantly, they encountered many opportunities to observe and experience the work of the sites they visited. For example, they observed the CHWs' efforts to communicate, using pictures, with a mother who had little knowledge of infant nutrition; enjoyed conversations with the CHWs in JICA site; and introduced themselves to UNZA faculty in English. Furthermore, students acquired unexpected knowledge, such as how the effectiveness of financial support is influenced by a community's difficulties in the financial management of their local health post. Improvement in intercultural competence, required for effective health care activities in international settings⁹⁾ can be obtained through fieldwork. Students' experiences in this program could influence their thoughts and actions through writing and discussion. The typical learning process is considered the transfer of knowledge from educator to learner. However, there are many other ways of learning outside the classroom, such as through reading books and having conversations¹⁷⁾. Diverse practices for learning are essential for complete understanding of international health care support¹³⁻¹⁴⁾. To meet the various requirements, I believe that an international fieldwork program is necessary in nursing education.

The students commented on how economic disparity across the country affected health care procedures, and acknowledged the hardships faced in this regard by people in developing countries such as the Republic of Zambia. The dedicated and empathetic attitudes of nurses to overcome the inconveniences caused by economic disadvantages were impressive at the JICA site. These experiences were highly beneficial to the students' understanding of the importance of empathy for intercultural competence. For intercultural healthcare support, empathy—understanding the inner worlds of patients or health care staff that might have different way of thinking due to different cultural backgrounds—is central to successful care outcomes

and helps develop positive interpersonal relationships.¹⁸⁾ Good communication skills may make medical providers more empathetic, even with patients of the same cultural background, who might be in a vulnerable state when receiving medical service.¹⁰⁾ In current clinical medicine operations, characterized by technology-oriented behavior and an increasingly complex health care environment, learning intercultural competence is useful for providing higher-quality, patient-centered care and support.

After lunch at the JICA site, the CHWs gradually began interacting with the students, lending support to the idea that the acceptance and appreciation of another culture helped overcome the communication problems arising from a difference in languages. However, better English skills would be useful in some settings; more direct communication would have been possible in the introductions to the UNZA faculty if students had better English skills. In actual clinical settings, where professional skills are required, the language barrier could no doubt result in treatment errors or less effective medical services.¹⁹⁾ In multicultural countries such as the United States and Canada, formal training for intercultural communication is encouraged for health care. Additionally, some physicians in Canada graduated from medical schools outside of North America before immigration, so immigrants themselves can be health care providers or patients.¹²⁾ Global fieldwork is very educational for nursing students, helping to broaden their world perspective. Incorporating a course in English communication in global fieldwork may enhance these positive effects.

The first trial of international fieldwork program was successful, although several problems were noted; the students' inadequate skills of conversation and presentation in English, and the lack of opportunities for students to practice nursing knowledge and expertise acquired in classrooms and hospitals were two of the most salient. After the first fieldwork trial, I made two more visits to Zambia to arrange more practical programs for students, which allows us to have more collaborators in Zambia for second trial, to be conducted in March 2014. The demonstration of health care skills by students to people in a local community is scheduled.

This was the first trial of the student-exchange program after the MOU was signed between the two schools of medicine in October 2012. Students' written accounts of their impressions revealed a very positive response to the program. As mentioned previously, further communication was proposed by UNZA faculty. The second program is scheduled in March 2014.

Conclusion

International fieldwork programs in countries with different cultures may be useful not only for nursing education but also for broadening students' perspectives on global issues.

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Reference

- 1) Shishani K, Allen C, Shubnikov E et al : Nurse educators Establishing new venues in global nursing education, *J Prof Nurs.* 28(2) : 132-134, 2012.
- 2) Hunter A, Wilson L, Stanhope M et al: Global health diplomacy : An integrative review of the literature and implications for nursing, *Nurs Outlook.* 61:85-92, 2013.
- 3) St.Pierre Schneider B, Menzel N, Clark M et al : Nursing's leadership in positioning human health at the core of urban sustainability, *Nurs Outlook.* 57 : 281-8, 2009.
- 4) Omaswa F : Human resources for global health : time for action now, *Lancet.* 371 : 625-626, 2008.
- 5) Jong-wook L: Global health improvement and WHO : shaping the future, *Lancet.* 362 : 2083-2088, 2003.
- 6) Christensen K, Doblhammer G, Rav R et al : Ageing populations : the challenges ahead, *Lancet.* 374 : 1196-1208, 2009.
- 7) Drain P, Primack A, Hunt D et al : Global health in medical education : a call for more training and opportunities, *Global Health.* 82(3) : 226-230,2007.
- 8) American Association of Colleges of Nursing : The essentials of baccalaureate education for professional nursing practice, 10-12, 2008.
- 9) Beach MC, Price EG, Gary TL et al: Cultural competency : A systematic review of health care provider educational interventions, *Med Care.* 43(4) : 356-373, 2005.
- 10) Gibson D, Zhong M : Intercultural communication competence in the healthcare context, *Int J Intercultural Relations.* 29 : 621-634, 2005.
- 11) Riner ME : Globally engaged nursing education : An academic program framework, *Nurs Outlook.* 59 : 308-317,

2011.

- 12) Rosenberg E, Richard C, Lussier MT et al : Intercultural communication competence in family medicine : Lessons for the field, *Patient Education and Counsel.* 61 : 236-245, 2006.
- 13) Nakada R, Narisawa K, Yanagihashi R et al : Study on oversea's short-term credit exchange of English and nursing subjects, *Shinshu Univ Institut Repository.* 26 : 47-54, 2001.
- 14) Tashiro J, Nagamatsu Y : Starting a master course and consistent development of baccalaureate course in "international nursing", *St. Luke's College Nurs.* 33 : 111-115, 2007.
- 15) Ruger JP : The changing role of the World Bank in global health, *Am J Public Health.* 95(1) : 60-70,2005.
- 16) UNICEF statistics and monitoring,
http://www.unicef.org/infobycountry/zambia_statistics.html,
http://www.unicef.org/infobycountry/japan_statistics.html
- 17) Ruben BD: Simulations, games, and experience-based learning : the quest for a new paradigm for teaching and learning, *Simulation & Gaming.* 30(4) : 498-505, 1999.
- 18) Morse JM, Andweson G, Bottorff JL et al : Exploring empathy : a conceptual fit for nursing practice?, *J Nurs Scholarship.* 24(4) : 273-280, 1992.
- 19) Jacobs EA, Shepard DS, Suaya JA et al : Overcoming language barriers in health care: costs and benefits of interpreter services, *Am J Public Health.* 94(5) : 866-869, 2004.

Table 1. Comparison of health data

	Average life expectancy at birth (2011)	Under-five mortality rate (per 1,000 live births) (2011)	Infant mortality rate (per 1,000 live births) (2011)	Neonatal mortality rate (per 1,000 live births) (2011)	HIV prevalence (2011)
Japan	83	3	2	1	<0.1
The Republic of Zambia	49	111	69	30	12.5
Developed countries	80	6	5	3	-
Least developed countries	59	110	71	34	-
World	70	57	40	23	-

Reference: UNICEF Statistics and Monitoring