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NIPH-JICA-net lectures presented by NIPH international health course alumnae

Etsuji OKAMOTO

Department of Health and Welfare Service, National Institute of Public Health

Abstract

The National Institute of Public Health started a two-year international health course held exclusively in English in 2000 for students from developing countries sponsored by JICA (Japan International Cooperation Agency). In 2004, the course was restructured to allow enrollment Japanese students and the school term was shortened to one year. Classes comprised of students from Japan and other countries provided ideal conditions for intellectual stimulation and interaction. In January 2006, teleconference lectures were introduced to take advantage of the newly developed JICA-net, which connected JICA offices throughout the world. Alumnae working as professionals in their home countries were invited to give lectures. A total of 29 lectures were presented over the seven years between 2006 and 2012 by 16 alumnae from 12 countries. Practicing professionals provided valuable reports on various topics, including the Buruli ulcer endemic to Africa, malaria control in Uganda, water sanitation in Kenya, health care for the indigent in Mongolia and a new school health project in the Philippines. Unfortunately the course was discontinued after the graduating class of 2012. This article intends to compile the achievements of JICA-net lectures to record in history. Also, audio-visual recording and transcripts of the lectures were donated to NIPH library to be available for the future.

keywords: distance learning, Japan International Cooperation Agency (JICA), international health, health human resources development

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I. Introduction

The NIPH started an international health course held exclusively in English in FY2000[1]. One student from Kenya enrolled in the first year and three JICA (Japan International Cooperation Agency)-sponsored students from Kenya, Tanzania and Zambia enrolled to the two year MPH course in FY2001-2003. In 2004 this course was restructured into a one-year MPH course enrolling both foreign and Japanese students with a class size of ten in FY2004. While Japanese students may apply directly to NIPH, foreign students must apply through their local JICA offices. Mixed classes with both foreign and Japanese students provided an ideal environment stimulating active interactions between them.

Unfortunately, as mentioned above, the course was

discontinued in FY2012 (the last class graduated in March 2012). In its 12 years history, it graduated a total of 68 students (Japan 20, Tanzania 8, China 7, Zambia · Kenya 4, Philippines · Laos 3, PapuaNewGuinea · Solomon · Cambodia · Afghanistan · Mongolia · Ghana 2, SriLanka · Uganda · Iraq · Senegal · Jamaica · Ethiopia · Samoa 1). Their positions and activities after graduation are described elsewhere [2]. Although the course was short lived, its curriculum had one unique feature: JICA-net lectures, in which alumnae taught students via a teleconference system. This article discusses the achievements and contents of the lectures.

II. JICA -net

JICA introduced a teleconferencing system connecting JICA offices throughout the world (JICA-net). A series of

corresponding author: Etsuji Okamoto
2-3-6, Minami, Wako-shi, Saitama, 351-0197, Japan.
Tel: +81-48-458-6208
Fax: +81-48-469-1573
E-mail: atoz@niph.go.jp



Figure 1 JICA-net lecture in a teleconference room of NIPH

James Ssekitooleko (Class of 2006) presents a lecture on 10 Jan. 2007 from JICA Uganda office. After the teleconference system was installed at NIPH, students did not have to travel to JICA Tokyo center to attend the JICA-net lectures as they had done in the first year. Note that the power point slides are displayed on wall and must be handled manually by a coordinator.

lectures to be delivered via JICA-net was introduced in FY2005 to take advantage of this innovative new technology. The JICA-net lectures invited the alumnae of the course who had returned to their countries and were engaged in their professional activities. When the school term of the course was shortened to one year in FY2004, students were left without an opportunity to communicate with the newly arrived students. The JICA-net lectures provided a valuable opportunity for students to meet their seniors and find out how they were contributing to their professional activities after completion of the course.

The first-year's lectures were held in January 2006. Four alumnae who had graduated in the previous year participated. At that time, the NIPH was not equipped with teleconferencing equipment and students visited JICA Tokyo Center to attend the lecture. The following year, NIPH was equipped with its own teleconferencing room which was made available for JICA-net lectures (Figure 1).

III. Coordination

Arranging the JICA-net lectures was a logistical challenge. The coordinator had to schedule times when all three parties could meet: lecturers, students and local JICA offices. Time differences also needed to be considered. Some lectures had to be scheduled late in the evening but it was difficult to connect to certain parts of the world late at night or in the early morning.

Because of this, it was not possible to connect to, for example, Jamaica. Lecturers had to travel to their local JICA offices. For some alumnae living in distant areas, traveling to JICA offices in a capital was time consuming and costly (lecturers received small honorarium from the NIPH but traveling cost to a JICA office was not reimbursed).

JICA-net lectures were scheduled for January-February during the school year. By that time, most didactic lectures were over and it was easier to coordinate schedules. Because the lecture was situated in the near the end of their school year, it was considered to be the culmination of the entire school year. By attending the lecture, students learned that they would be expected to appear as lecturers the following year, further increasing their motivation.

IV. Lectures

Lecturers submitted Power-Point files in advance and printouts were distributed to students. A coordinator handled it according to directions given by the lecturer. A lecture typically took one hour and was followed by Q&A session. Both lecturers and students were displayed on screen simultaneously allowing real time interactions (Figure 2). All students were required to submit a one page report on each lecture and grading was based on their participation and reports.



Figure 2 How JICA-net works

Canisius Banda and Shizu Watanabe (both Class of 2005) presents lectures jointly on 16 Jan.2007 from JICA Zambia office. Note that the listening students are displayed in an inlet of the screen. The inlet also displays a notebook computer showing lecturers which slide the students are watching. Handling the audiovisual equipment effectively to facilitate active interaction between lecturers and students was a challenge for a coordinator.

V. Contents

Over seven years, the JICA-net lecture held a total of 29 sessions presented by 16 alumnae from 12 countries (Table 1). The contents of selected lectures are summarized below (the number in bold parenthesis corresponds to the number in Table 1).

- Buruli ulcer in Africa by Samuel Agyemang Boateng (Ghana, class of 2007) on Jan 18. 2010 [18] and Feb 10. 2012 [29].

Buruli ulcer (BU) is a bacterial infection caused by *Mycobacterium ulcers*, acid-fast bacilli similar to pathogens of tuberculosis and leprosy. BU is endemic in the central region of Africa but little is known to Japanese medical community. Therefore, the lecture was a valuable teaching material to professionals who were not knowledgeable about the disease. BU affects skin and soft tissue leaving patients scarred and disabled. The bacteria infects through minor skin lesion and hence affects children most. The lecture contained ample pictures of actual cases and practical information on pathology, diagnosis, prognosis and public health measures to control the disease. He also published an original article on tuberculosis in Ghana [3, 4].

- Malaria control in Uganda, James Ssekitooleko (Uganda, class of 2006) on 10 Jan. 2007 [5] and 21 Jan. 2009 [14].

Malaria remains a serious public health threat in many developing countries. James Ssekitooleko worked at the Ugandan Malaria Research Centre and his 90 slides presentation provided a practical learning course on the disease. He started by providing an overview of the very basics of the disease including its epidemiology and social burden. He further described the latest malaria control methods including insecticide-treated nets (ITN), indoor residual spraying (IRS) and case management. He referred to the special relationship between malaria and HIV, a scientific fact not well known to professionals in developed countries. As a researcher, he also lectured about the methodology of prioritizing research agenda in an evidence-based manner. This was used in formulating the health policy of Uganda.

- Health care in poor households in Mongolia, Nansalmaa Bazarragchaa (Mongolia, class of 2007) on Jan 19. 2011 [22]

What is it like to be homeless in a country with winter temperatures as low as minus 20 centigrade? In a country with severe winters, poverty can be a life or death situation. Mongolia has a population of only 2.67 million but as many as 36.1% of them are living below the poverty line. If they have to live in a life or death situation, then what their health care will be available to them? She surveyed the socioeconomic status and utilization of health care services by the indigent population and analyzed how poverty hinders access to health care. She

Table 1 List of JICA-net lectures

No	date	Lecturer	graduate year	Country	affiliation at the time of lecture	topic
1	2006/1/13	Hiltruda Chrizant Temba	2005	Tanzania	Ministry of Health, National AIDS Control Programme	Health Education on STI/HIV/AIDS control in Tanzania
2	2006/1/13	Ray Mrisho Masumo	2005	Tanzania	Regional dental officer, Kagera	Oral health in the African region: A regional strategy 1999–2008
3	2006/2/14	Simon Kungu Kimani	2005	Kenya	Kenya Medical Training College, Nairobi	Introduction of epidemiology and health care planning in slum communities
4	2006/2/14	Bertha Adwoa Gyau	2005	Ghana	Komfo Anokye Teaching Hospital, Kumasi	Oral health: a public health challenge
5	2007/1/10	James Ssekitooleko	2006	Uganda	Uganda Malaria Research Center	Malaria and HIV/AIDS control in Uganda: successful story what worked
6	2007/1/16	Canisius Banda	2005	Zambia	Ministry of Health Headquarters in Lusaka	Factors that influence the choice of the place of delivery among rural pregnant women in Chongwe, Zambia
7	2007/1/16	Shizu Watanabe	2005	Japan	JICA Zambia office	HIV/AIDS in Zambia and JICA's support
8	2008/1/18	Boateng Samuel Agyemang	2007	Ghana	Suhum Kraboa Coaltar District	TB/HIV collaborative implementation activities and community TB care in Ghana
9	2008/1/18	Liangyong Lu	2007	China	Beihai Health and Quarantine Bureau	The development of public health after SARS in China
10	2008/2/1	Nansalmaa Bazarragchaa	2007	Mongolia	Ministry of Health, Master plan implementation management unit	Health sector strategic master plan development process in Mongolia and its implementation tools
11	2008/2/1	Chau Darapheak	2007	Cambodia	head of quality assurance, NIPH, Cambodia	Community-based surveillance system in Cambodia
12	2008/2/1	Artemio R. Licos, Jr	2006	Philippines	Department of Education, Division of La Union	Child-to-child school health program in the province of La Union, Philippines
13	2009/1/19	Ayako Tokunaga	2005	Japan	Chief advisor, JICA School Health and Nutrition Project, Nepal	School health and nutrition project in Nepal/National family planning and primary health care programme in Pakistan
14	2009/1/21	James Ssekitooleko	2006	Uganda	Uganda Malaria Research Center	Identifying research priorities in malaria control
15	2009/1/23	Artemio R. Licos, Jr	2006	Philippines	Department of Education, Division of La Union	Child-to-child school health program in the province of La Union, Philippines
16	2009/1/23	Simon Kungu Kimani	2005	Kenya	Kenya Medical Training College, Nairobi	Water sanitation in Kenya
17	2010/1/13	Simon Kungu Kimani	2005	Kenya	Kenya Medical Training College, Nairobi	Milestones and Challenges in achieving key Millenium Development Goals on health in Kenya
18	2010/1/18	Boateng Samuel Agyemang	2007	Ghana	Suhum Kraboa Coaltar District	Buruli ulcer control in Suhum Kraboa Coaltar district, issues, challenges and way forward
19	2010/1/19	James Ssekitooleko	2006	Uganda	Uganda Malaria Research Center	Integrated community case management in Uganda
20	2010/1/20	Artemio R. Licos, Jr	2006	Philippines	Department of Education, Division of La Union	Child-to-child school health program in the province of La Union, Philippines
21	2010/1/27	Asaua Fa'asino	2007	Fiji	Secretariat of the Pacific Community, Fiji Sub-regional Office	Adolescent Health & Development: A practical modality for implementation of a multi-country program
22	2011/1/19	Nansalmaa Bazarragchaa	2007	Mongolia	Public Health Consultant for the Project "Protecting Health status of the Poor during the Financial Crisis" JFPR 9136, Ministry of Health	Access to health care of poor households in Mongolia
23	2011/1/26	Chamaleen J Kasturiarachchi	2010	Sri Lanka	Medical officer Management development and Planning Unit Ministry of Healthcare & Nutrition, Colombo	Enhanced planning used for better management and development of health sector in Sri Lanka
24	2011/1/28	Simon Kungu KIMANI	2005	Kenya	Head, Faculty of Public Health Sciences Department of Environmental Health Sciences Kenya Medical Training College, Nairobi	Community interventions on HIV/AIDS management in central Kenya, "Key challenges"
25	2012/1/5	James Ssekitooleko	2006	Uganda	Uganda Malaria Research Center	Integrated community case management in Uganda
26	2012/2/8	Artemio R. Licos, Jr	2006	Philippines	Department of Education, Division of La Union	Child-to-child school health program "Little Doctors"
27	2012/2/10	Simon Kungu Kimani	2005	Kenya	Head, Faculty of Public Health Science Kenya Medical Training College, Nairobi	Malaria control interventions by public health experts and the affected communities
28	2012/2/10	Ali Omar Ali	2007	Tanzania	Integrated Reproductive and Child Health Programme Ministry of Health, Zanzibar	General Concept of Surveillance – Role and importance in disease control, Outbreak Investigation – Report write during the investigation
29	2012/2/10	Boateng Samuel Agyemang	2007	Ghana	Municipal Director of Health Services Suhum Municipal	Buruli ulcer control in Ghana

conducted not only statistical analysis, but also face-to-face interviews to obtain narrative quotations on how the indigent people feel about their health and care they receive. Her lecture demonstrated the urgent need of achieving universal health coverage for any countries to guarantee affordable health care to the entire population.

- Water sanitation in Kenya, Simon K Kimani (Kenya, class of 2005) on Jan 23, 2009 [16]

Kenya and the NIPH have a long cooperation on water sanitation [5]. Simon K Kimani majored in water sanitation and served as head of environmental health sciences Kenya Medical Training College after graduating from the NIPH. He volunteered JICA-net lectures many times on a wide-ranging topics to provide. In 2009, he presented on his own field. He started by describing water-borne diseases such as cholera and typhoid and emphasized that improper handling of drinking water causes serious public health threats. He went on to describe how water should be treated to ensure a safe water supply. He also discussed environmental threats he observed during a survey of the suburbs of Nairobi. He presented numerous pictures showing contamination of rivers and water reservoirs by waste, chemicals and deforestation. He concluded by quoting the Millennium Developmental Goal (MDG) No.7 to ensure environmental sustainability and called for harmonizing the economic development and environmental protection.

- Family planning and primary care in Pakistan, Ayako Tokunaga (Japan, class of 2005) on Jan 19, 2009 [13]

Ayako Tokunaga is a Japanese national who earned her medical degree in Pakistan. Shortly after graduation from the NIPH, she was sent to Pakistan as a JICA expert. While there, she experienced an earthquake on October 8th, 2005 which killed 86,000 people (the death toll included one male JICA expert and his son). She lectured on the activities of Lady Health Workers (LHW) in family planning and primary care, who she assisted in training. A total of 100,000 LHWs were working all over the country. LHWs also suffered casualties from the quake: in one district, 11 LHWs out of 616 lost lives and 124 of them were rendered homeless. Despite the disaster, she remained in Pakistan and completed her two-year task. When she presented her JICA-net lecture, she was deployed in Nepal and her lecture also included "school health and nutrition project in Nepal".

- Child-to-child school health program in the Philippines, Artemio Licos Jr. (Philippines, class of 2006) on Feb 1, 2008 [12], Jan 23, 2009 [15], Jan 20, 2010 [20] and Feb 8, 2012 [26]

In schools, teachers instruct children. But Artemio Licos Jr (Jun) attempted a new method of improving school dental health: appointing some children as "little doctors" and instructing them on the teaching of correct tooth brushing to their classmates. He started the

program in ten pilot schools in La Union, the Philippines in 2006, shortly after he graduated from the NIPH. He then added 16 more schools the second year. Each school forms an exclusive club which consists of a club advisor and 8-10 club members from grades 5 and 6. The club is called the "School Little Doctors' Club". The program includes a "Directly Observed Tooth brushing (DOT) strategy", in which members of the School Little Doctors' Club directly supervise tooth brushing drills by the fellow pupils, a Child-to-child approach. He concluded that "the success of this group depends on the commitment and actual involvement of each little doctor member". His achievement was published as an original article [6].

VI. Conclusions

The JICA-net lectures were made possible by technological innovations. It was a fortunate coincidence that the author was appointed as a coordinator of special lectures and the JICA developed the JICA-net teleconferencing system. Technology has since advanced further. The same form of teleconferencing is now possible over the net via, for example, Skype. People are now able to view and talk with anybody in a distant place almost free of charge. The JICA-net lectures were literally a technological breakthrough in education methods.

Another advantage of the JICA-net lectures was that their contents could be recorded in audiovisual media, allowing them to be viewed repeatedly. Many lectures were recorded on DVDs, which were bound to a book and were donated to the NIPH library for viewing in the future. Rather, one might consider posting the contents over the web like the "super course" [7].

The NIPH international health course was short-lived, lasting only 12 years, but the contents of the JICA-net lectures and the efforts and dedication of its alumnae will be remembered forever in history.

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国立保健医療科学院国際保健コース修了生によるJICAネット講義

抄録

国立保健医療科学院では全て英語で講義する外国人向けの国際保健コースを2000年度より（於：旧公衆衛生院）開設した。当初は2年制で初年度はケニアから1名、以後毎年3名の途上国の学生をJICA（国際協力機構）研修生として受け入れた。2004年度より1年制のコースとなり、外国人と日本人の混成クラスに改組された。本コースは日本人と外国人が混在し刺激しあい、国際的に活躍できる公衆衛生専門家を養成する上で理想的であった。しかし本コースは2012年修了の3人を最後に休止された。12年間という短い期間であったが68人の修了生が巣立ち各国で活躍している（日本20、タンザニア8、中国7、ザンビア・ケニア各4、フィリピン・ラオス各3、バプアニューギニア・ソロモン・カンボジア・アフガニスタン・モンゴル・ガーナ各2、スリランカ・ウガンダ・イラク・セネガル・ジャマイカ・エチオピア・サモア各1）。著者は2002年度入学者より生物統計学、医療情報学を担当してきたが、改組後はさらに国際保健特論という主に外部講師による自由設計科目も担当した。ちょうどJICAが各国事務所を結ぶテレビ会議システム（JICAネット）を導入した頃だったため2006年1月よりJICAネットを活用した遠隔授業を導入した。JICAネット講義ではコース修了後それぞれの国に戻って活躍する修了生に講師を依頼し、途上国での公衆衛生活動の実践的な報告を学ぶとともに、1年制になって希薄がちであった先輩後輩間の絆を強め、修了生のネットワークを強化するねらいもあった。講義は1年間の在籍期間の最終段階に行なわれ、研修生には「来年は自分が講師になる」という自覚を高める効果をもたらした。JICAにとっては、研修生の帰国後の活動状況をモニターする手段ともなった。本稿ではコースが休止されたことを区切りとして7年間にわたるJICAネット授業の成果をまとめた。計29回の講義が12か国にまたがる16人の卒業生によって提供された。その内容は、わが国にはほとんど知られていないブルリ潰瘍と呼ばれる感染症、ウガンダのマラリア対策、ケニアの水確保と環境破壊問題、モンゴルの貧困層の受療状況そしてフィリピンにおける学校歯科保健の新しい試み等多彩であった。本稿はこれら卒業生による貴重な講義記録を一覧として記録するものである。また録画媒体ならびに講義記録は冊子化して国立保健医療科学院図書館にて閲覧可能とした。

キーワード：遠隔授業，JICA（国際協力機構），国際保健，人材育成

岡本悦司
国立保健医療科学院医療・福祉サービス研究部