Learning Experiences as the First JICA Course Student in Tanzania

Report

Learning Experiences as the First JICA Course Student in Tanzania

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タンザニアにおけるJICAコース一期生としての活動報告

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〔要 旨〕

2014年の覚書により聖路加国際大学と国際協力機構（JICA）によるタンザニア連合共和国母子保健支援ボランティア連携事業が始まった。タンザニアにおける母子保健指標の向上，及び，母子保健分野でグローバルに活躍できる人材育成を目的に新設されたJICAコースでは，３年間の修士課程中，１年９ヶ月は青年海外協力隊（JOCV）としてタンザニアに派遣される。タンザニアの５歳未満死亡率は先進国の約10倍高く，マラリア，肺炎，下痢，栄養失調といった治療や予防が可能な疾患により，毎日270人の子どもが亡くなっている。本報告では，JICAコース一期生が，学生としての研究とJOCVとしてのボランティア活動をどのように達成したか，また，国際協力を行う上での基本原則について記述する。

〔キーワーズ〕 国際協力，青年海外協力隊，タンザニア，母子保健

〔Abstract〕

With the collaboration of the Japan International Cooperation Agency (JICA), St. Luke's International University started the JICA course, which have been dispatching students for about 2 years to Tanzania as a JICA volunteer within 3 years of master's course. The course aims to improve maternal and child health indicators in Tanzania by quality improvements in the hospital and to develop human resources who can lead to solve global health issues. This is because the under 5 mortality rates in Tanzania are still 10 times higher than those in high income countries. Every day, 270 children under 5 years of age die due to preventable and treatable diseases such as malaria, pneumonia, diarrhea, and undernutrition. This report describes how the first JICA course student strived to achieve her two roles of completing research as a student and working for quality improvements as a nurse volunteer, as well as embodied the principles of the international cooperation.

〔Key words〕 international cooperation, JICA, maternal child health, Tanzania

Ⅰ. Introduction

Maternal and child health volunteers began a 10-years project launched in 2014 with the collaboration of St. Luke's International University (SLIU) and Japan International Cooperation Agency (JICA). It enables participants to earn a master's degree in 3 years while working as a JICA volunteer in the health sector field

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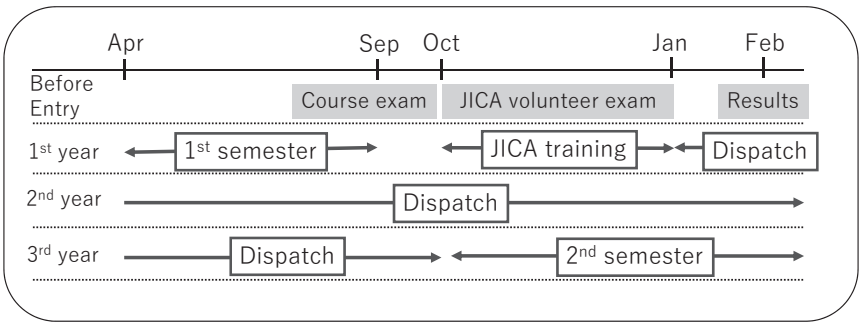

Figure 1. Outline of JICA course

in Tanzania for 2 years (Figure 1). The project aims to improve maternal and child health indicators in Tanzania and to develop human resources who can lead to solve global health issues by practicing in the field under the supervision of SLIU faculty members.

Ⅱ. Child Health Index in Tanzania

Tanzania is one of the few African countries meeting Millennium Development Goal 4 for child survival dropping under-five mortality rates (U5MR) steadily from 166 deaths per 1,000 live births in 1990 to 112 in 2005, and to 54 in 2017 by introducing antimalarial medicines, oral antibiotics, oral rehydration solution, and vaccinations[1]. However, compared to high income countries with U5MR of 5 in 2017, children under 5 years of age in Tanzania are over 10 times more likely to die than those in high income countries. Every day, 270 children under 5 die due to preventable and treatable diseases such as malaria, pneumonia, diarrhea, and undernutrition. Although urban areas have better health services, education, and living conditions than in rural areas, a national survey found that neonatal mortality in urban areas is higher than in rural areas with 43 and 24 deaths per 1,000 live births, respectively[2].

Ⅲ. MNH and Pediatric Department

The first JICA course student, Ms. Tada, was dispatched to Muhimbili National Hospital (MNH) located in Dar es Salaam, the largest city in Tanzania. It is a national tertiary referral hospital, a research center, and a university teaching hospital sectioned into 29 departments and 107 units with 1,500 beds, attending 1,000 to 1,200 outpatients per day, admitting 1,000 to 1,200 inpatients per week. It has 3000 employees of whom 300 are doctors and specialists, 900 registered or enrolled nurses, and the rest are supporting operations employees.

The pediatric department consist of an outpatient-clinic and 8 wards, which are general ward A (neurology, pulmonology, cardiology, and infectious disease), general ward B (nephrology, diabetes and endocrinology, gastroenterology, and dermatology), diarrhea ward, malnutrition ward, acute pediatric care ward, oncology/hematology ward, surgery ward, and burn ward. Diarrhea ward staff treats patients with acute watery diarrhea, dysentery, and persistent/chronic diarrhea. Malnutrition ward is for children with kwashiorkor and marasmus, and staff manages nutritional stabilization and rehabilitation. Although the pediatric department holds around 200 beds, the bed occupancy rate differs according to the month, sometimes overcrowded as 2 patients sharing a bed, or waiting on the floor for bed vacancy.

The kangaroo ward in the maternity department is for premature and low-birth-weight infants weighing under 1500 gram in need of kangaroo mother care, a progressive method for neonatal survival in resource limited settings[3].

Ⅳ. Keys for building relationships with local colleagues

1. Swahili language

Swahili language is the key for communicating with Tanzanians, for few colleagues are confident in their English, and most patients speak only Swahili.

At first, although Ms. Tada knew that there were important messages for quality improvements hidden in the chatting, especially during tea breaks at wards when people complain about one's situation, she could not understand. Therefore, she started by remembering 10 new words usually used within the hospital each and every day and joined the class for in-patient children as they use easy vocabularies compared to adults.

Also, talking with anyone on the street to practice both listening and speaking and to have cultural exchange was another short cut to improve the language with enjoyment. Because of her efforts in acquiring the Swahili language she was treated as a colleague instead of a foreigner. When foreigners came to present seminars that also had to provide a treat such as refreshments or some other treat for the attendees. She knew she was being accepted as a colleague when they no longer asked her to provide the treat.

2. Feedback of observation using evidence

Taking account of their difficult circumstances, such as lack of medical supplies, shortage of staff, water outage, and blackouts, she searched for the underlying clinical challenges for quality improvements. When one gets used to a certain situation, it always makes one hard to even wonder what is right or wrong. Therefore, before taking any measures, she shared the snapshots to the staff where improvement was needed. They took their time discussing the desired situation using the picture for comparison so that they could agree on the same goals. It was through this discussion when she noticed that they tended to the situation more seriously when shown the evidential guidelines from International Organizations.

Ⅴ. Solving small challenges based on the observations

Solving small challenges in the ward from observations was a simple way to start one's activity such as making visual educational materials on nutrition to hang it on the wall (Image 1), making medication boxes with separations for each patient to reduce delaying time for medication (Image 2), and holding personal protective equipment seminar for nurses in danger of anticancer drugs.

Ⅵ. Designing 5S-KAIZEN project

5S-KAIZEN is a standardized method of quality improvement, originally implemented by manufacturing enterprises in Japan, which is now widely adopted in health sector throughout low- and middle-income countries by JICA[4)5)]. Although the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDEC) in Tanzania has been implementing the

Image 1. Visual educational material on nutrition


Image 2. Before/After of Medication boxes

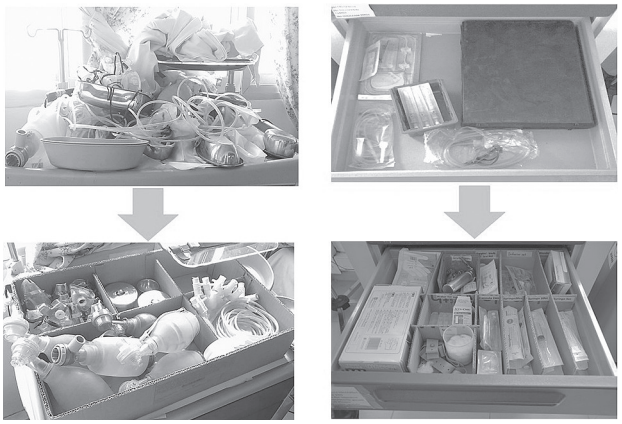
Image 3. 5S of a crash cart

project at MNH as a pilot site since 2007, few staff understand the method and its use. Therefore, as a model of 5S-KAIZEN, together with the staff, they designed 2 main themes, in the pediatric and maternity departments.

1. "The Crash Cart Competition"

They organized a crash cart (Image 3), or 'box' crash cart, because an actual crash cart might not be available for each ward in the pediatric department.

Image 4. Mothers watching educational video

Image 5. The 1st JICA course student and her colleagues

This was because there were continuous emergencies where children did not receive medical treatments due to unpreparedness of medical supplies.

They evaluated the crash cart readiness by measuring the time staff members took to prepare what they needed by giving a fictional emergency situation without any notice before and after organizing it. When deciding the contents of the crash cart, they referred the Resuscitation Council (UK) website[6] and improvised in terms of resource feasibility in limited settings by receiving advice from the local pediatric physician.

As a result, all wards but one succeeded in reducing time by at least 30 seconds, and 2 minutes and 38 seconds at most. By competing between wards, those wards that ranked lower became motivated and started organizing their crash cart on their own without any supervision. Work flow improved by organizing the medical supplies needed in emergencies in one spot (crash cart), and decreased wasted time searching for medical supplies. Also, minimized time by knowing where each medical supply was by checking the contents of crash cart each shift. However, the ward, which could not shorten the time was because of the insufficient dissemination of the crash box to all staffs in the ward[7].

2. "Discharge education for all new mothers"

The challenge we identified within the neonatal ward was the lack of standardization of discharge education among the staff, depending on their knowledge and skills. Moreover, many mothers were discharged home without any education due to shortage of staff. The number of staffs was not something we could solve within the ward, which threatened to demotivate us. However, through discussion, we came up with an innovative idea to create an educational discharge video for new mothers so as to cover the shortage of staff. Following the discharge education content written by WHO, receiving advice from the local neonatal medical physician, and with the help from JICA to purchase the television, we managed to provide standardized education for new mothers before discharge (Image 4).

Ⅶ. Research theme: Mothers' attitude and behavior towards breastfeeding

The research question was decided through the experience at out-patient clinic. "Why do mothers quit exclusive breastfeeding (EBF) ?" EBF means to give infants breast milk only until the infant's age of 6 months, which is recommended by WHO[8], especially in low-income countries, as safe water for formula milk is still difficult for local mothers to get. Although EBF is the key for improving neonatal outcomes, the majority of infants who came to the clinic with insufficient growth were not exclusively breastfed. Therefore, the results of the research describe how mothers continue breastfeeding after discharge and how they think about EBF[9].

Ⅷ. The principle of successful international cooperation: "We" instead of "I"

Running a project in a low-income country by oneself is not easy. One may be demotivated by encountering language barriers, unsuitable climate, and frequent water and electrical outages or may face difficulty conducting a research all alone. Besides, one may suffer

from high stress especially when working at a hospital, facing children's death due to diseases that are preventable or treatable in high-income countries. However, if one strives to understand every person one encounters and encourages involvement in the project, instead of doing everything by oneself, one will never be alone. Others would help one out and treat one as their family. When the project is successfully finished, they would say, "We have done it ourselves," with the feeling of accomplishment.

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