



# Faculty of Medicine Siriraj Hospital, Mahidol University Siriraj Resident/Fellow Exchange Program (Fujita Health university, Nagoya, Japan) From 3 February 2020 to 20 February 2020



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3 <sup>rd</sup> year resident

# **Overseas Clinical Elective Rotation Final Report**

#### **Introduction**

My name is Onjira Wongdontri. I was graduated from Chulalongkorn university. Currently, I am 3 <sup>rd</sup> year physical medicine and rehabilitation resident.

#### **University Review**

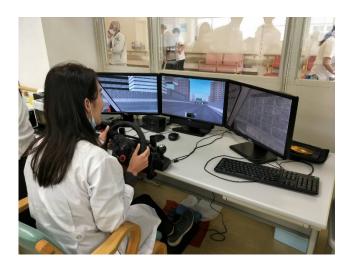
Fujita Health University is one of the largest university hospitals with 1,500 beds. This hospital is located in to Toyoake City, Aichi ,Japan. There are 60 beds for inpatients rehabilitation department. There are also two other hospitals that are branches of Fujita Health university. First is Fujita Health University Bantane Hospital which serves as the local medical care network hub in the central part of Nagoya City. It engages in community-based medical activities. The second is Fujita Health University Nanakuri Memorial Hospital which is a Japan's first palliative care ward in a university hospital located in Tsu city. The FHU is well known for its Robotic and dysphagia training. In 2018, the Welwalk WW-1000 robot which was invented by professor Eiichi Saitoh, Director of the Department of Rehabilitation Medicine, Fujita Health University, won 8th Robot Award.

#### **Expectation and Objective**

First, I want to invent reasonable price robot which is easy to access for Thai people. I believe with my intellectual-curious I will achieve core knowledge about robotic training and adapt it for Thai patients.

Second, eating is one of basic function of humanity which every patients shall have. Many cerebrovascular disease patients end up with feeding via nasogastric tube or percutaneous endoscopic gastrostomy. Fujita Health University has very effective dysphagia management team. They make some type of food which are easier for the patients to swallow safely without aspiration. For example, they thicken up the liquid so that it is harder to flow in to patients<sup>,</sup> airway, as the result, patients can drink this liquid safely without any complications. I will definitely lean about useful approachment and management in dysphagia patients from this observationship. I expect to share my knowledge and experience gotten from this observationship with my colleges and also use it with my patients

#### 4. Knowledge/Experience gained



From FHU, I leant difference technique in treating dysphagia patients for example balloon dilation in patients with upper esophagus sphincter tightness. This technique is very easy and effective in treating patients. There were also many different techniques to compensate swallowing problems for example trunk rotation or reclining technique to prevent aspiration

The difference types of robots and games were used for training patients for example the game for improve balance in elderly or stroke patients and the game for driving in disable patients. I had tried this robot and game and learnt how they worked. Our supervisor is Ms. Akahori who was very helpful.

In japan, Patients have to pay 30 % for inpatient rehabilitation training program. The insurance will pay for 70%. They can admit in the hospital for rehabilitation training only one time, after that the physical therapists will visit the patients at their houses for some advice and care the length of inpatients stay was longer than Siriraj hospital. The patients can be admitted in IPD for rehabilitation for 8 weeks compare with 3 weeks in Siriraj hospital. Most of stroke patients in FHU are acute stroke patients. In Siriaj we admit both acute and chronic patients. Because in japan only acute patients can be admitted, they don't have to wait for a long time for intensive rehabilitation. The duration from onset of disease to intensive

rehabilitation in Siriraj hospital is longer than in FHU. However, motor recovery in stroke patients is generally the best in the first 3 months after onset so I think that if we can have more beds for inpatients rehabilitation training or admit only acute to subacute patients, it will be benefit for patients for early training.

For duration of training because FHU have many robotic traing so the physiatists don't have to spend times training patients. They can focus on what the patients really need for training rather than sitting ang raise their arms and legs so the patients receive higher intensity of rehabilitation. Futhere more, the physiatists also have many technique to evaluate the activity of patients before and after rehabilitation program for example they have special vests that can record the activity of the patients and also the vital sign of the patients

#### **In-depth Comparison of Education**

In FHU, there are only 5 residents. The residents have to rotate to other two hospitals. There have conference with nurse physical therapists and occupational therapists every day about the patients in the morning and the conference about the new patients once a weeks. There are also only two team in the wards or team A and team B and everybody in the team have to participate the conference. All of information was recorded in computer which can be opened everywhere.

In Siriraj hospital, we have more residents and more lectures but fewer conference. In our hospital we don't have conference about the patients regularly. The therapist aren't devided into team as the doctors and patients so it may be difficult to do the conference as a team as in Japan. The information about the patients are recorded in papers so it is more difficult for health care provider to reach the patients' information.

#### In-depth Comparison of Technology



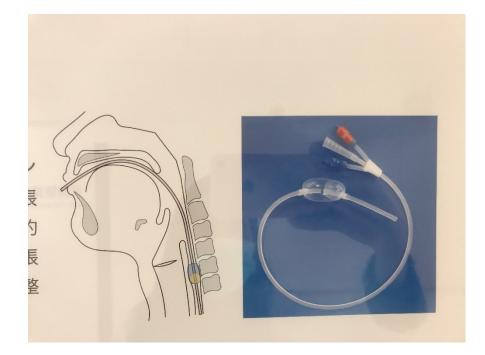
FHU has robotic training. In

both conventional training and Siriraj hospital, we also have

robotic training but the robot mayn't enough for the patients hence the patients can use the robot traing for only 3 times a week compare with 7 days per weeks in FHU.

In FHU there also have robot for driving training or balance training. In our hospital we still used conventional technique which mayn't enough for training the increasing number of patients.

## **In-depth Comparison of Technique**



For patients with medullary infarction who have dysphagia problem, they use balloon dilatation technique for dilate UES. The patients will receive balloon dilatation by speech therapist before swallowing training every day. I think that this technique is very interesting and very useful for dysphagia patients.

After the physiatists get the consultation from the doctor for the dysphagia management. The dysphagia team consists of doctor, dentists, dental hygienist, speech therapist and nurse will do bedside fiberoptic endoscopic evaluation of swallowing.

In Siriraj hospital, we don't have bedside VE. Our VE team consists of doctor nurse and occupational therapists. I think that dentists are also important in preventing pneumonia. The idea of forming VE team is benefit for the patients because they will receive early management. There is also no videofluoroscopy and balloon training in Siriraj hospital

#### **Benefits**

From this observationship, I have seen many things that I have never seen before during three years of residents training. Not only the knowledge but I also get the experience which I can't get from Thailand. After come back from Japan,I will share this knowledge and experience with my friends and staff so we can discuss about how to adapt this technique in Siriraj hospital.In the future,I also interested in developing some robot for training the patients.

#### Life in abroad

FHU provide single bedroom with many facilities. There are washing machine, microwave and refrigerator etc. There is convenient store in front of the dormitory so it is very easy to buy whatever I want. I can go to nearby city by taking shinkansen from Nagoya station. It take about an hour to go to nearby city such as Osaka or Kyoto.

#### Future plan

I want to try using balloon dilatation in Wallenberg patients. The bedside fiberoptic endoscopic evaluation of swallowing also practical in our hospital so that the patients can receive early intervention. The idea about inventing robot can be done in the future also.

## **Recommendations**

This program is very good and knowledgeable however many activities are Japanese language. If the residents who want to go to FHU have good Japanese skill, this program will be more benefit.