# SPECIAL REPORT

# UKM Students Global Mobility Programme to Niigata: Gaining New Experience, Medical Knowledge and Culture in Japan

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In the middle of January 2014 during the winter season, three post graduate students from Community Health Department, Faculty of Medicine, Universiti Kebangsaan Malaysia (UKM) were invited to have a taste of experience on public health practice in Niigata Graduate School of Medicine & Dental Sciences (NU) under Division of International Health (Public Health). This is the fourth group which was invited through the student exchange program between both universities. The journey took almost 7 hours from Kuala Lumpur International Airport to Narita International Airport by plane; and another 2 hours by bullet train (shinkansen) ride from Tokyo City to Niigata prefecture. The cold weather, which was below 2 degree Celsius, did not stop our burning desire to step into the country which was well known for its modernization and yet still upholding its ancient and renowned tradition.

Not many would know that Niigata was known as the "Rice Capital of Japan". The large variation of seasons and temperature between night and day, the fertile soil and the pristine melting snow that feeds into the rice paddies create a natural environment for nurturing Niigata's exquisite rice. Niigata boasts Japan's biggest

harvest of rice, which is essential to Japanese cuisine, crackers and sake production.

During our visit, we were made known on the Japanese code of etiquette, which governs the expectations of <u>social behaviour</u> in the country and is considered very essential. Bowing for example, is considered extremely important in Japan, so much so that, although children normally begin learning how to bow from a very young age, companies commonly provide training to their employees in how to execute bows correctly. There are also certain etiquette applied during eating, drinking, exchanging gifts and visiting. Giving a personal business card is essentially important and therefore we were made the effort to prepare our own cards during the visit.

Upon our arrival, we were welcomed by the Head of Public Health Division; Prof. Dr. Reiko Saito and her colleague, Dr. Yugo Shobugawa. The introduction to the division was given and we were introduced to the staff in the division. The division is currently prioritising on the research related to avian influenza as well as Norvovirus through genetic study and Geographical Information System (GIS).



Public Health Division headed by Prof. Dr. Reiko Saito (2nd from left).

During the first day of the visit, we were astonished to know that Niigata city possess its own "public health hospital" which was developed to cater disease outbreak and disaster. Recently it has been used for influenza outbreak as well as providing healthcare services for the victims of earthquake. During the usual operating hours, the hospital will provide a specialist health clinic ranging from internal medicine, orthopedics, pediatrics and obstetrics speciality. It has its own disaster wards, complete with laboratory as well as radiological investigation equiptments.

#### VISIT TO IKUTOPIA SHOKU HANA

Another eye opening experience was a visit to Ikutopia Shoku Hana. This was an effort made by the Japanese government to incorporate the essence of Japanese culture and healthy lifestyle. It was an amazing place which could educate everyone from every stage of life to participate. It provides an interactive way of learning, ranging from learning on healthy food and healthy way of eating, gardening and caring for the animals. Cooking and gardening classes are also available for young Japanese adults.





Interactive learning for everyone on Japanese way of eating. We were accompanied by Dr. Yugo (far right) and Dr. Tsubasa Suzuki (2<sup>nd</sup> from right).

## ELDERLY HEALTH IN NIIGATA

Nishi General Sports Centre is one of the Japanese government's initiatives to promote healthy lifestyle for the elderly population. It is a sports complex that houses various recreational facilities. It is located in Ikarashi, adjacent to the main campus of the University of Niigata Prefecture and facing the Japanese ocean. We were introduced to three experienced instructors; Hiroko Shinoda, Professor Kunihiko Shinoda and Yuki Ito (from

Japan Health Promotion & Fitness Programmer Health, Faculty of Education, University of Niigata). We had the opportunity to join the exercise session with a group of female participants. The exercise was designed to address physical issues related to elderly; balancing, coordination, strength and flexibility. The most interesting part is that we were able to interact with most of the participants even though there were communication barrier.



Specific instructions were given to all participants on the benefits of the exercise. We were invited to join the activity as well.

# SEKIYA OMOTO EN

The Japanese government has built many nursing homes for the elderly; and more than 20 facilities were built in Niigata alone. This home provides a short term and long term placement, as well as day

care services where roundtrip transportation was provided. The facility takes into account several key aspects such as comfort and safety for both care givers and the patron as well. We were impressed as the care givers are highly trained on attaining the need of the elderly. The ergonomic lifting machines which are available for the facility are used to manoeuvre the elderly from outside and into the bath tub, and they are also available in the roundtrip van which is use to lift the elderly who is dependent on wheelchair.





The care givers in Sekiya Omoto En. Upon arrival, we were given a warm welcoming celebration and the Malaysian national anthem; Negaraku, was played.

### **GIS TRAINING**

During our attachment at Niigata University, we were given 5 days 'hands-on' training in using the Geographical Information System (GIS) software. This software is a useful tool to perform analysis concerning the environment and its relationship with health. The GIS training program was conducted by Dr. Tsubasa Suzuki. The GIS training covers topic that includes 1) Introduction to the ArcGIS application; 2) Integration of maps in the ArcGIS application; 3) Analysis of data and projection of spatial patterns and 4) Usage of ArcGIS application in the medical field.

The knowledge on GIS analysis that we have learned in this training session will definitely be useful in our Doctor of Public Health (DrPH) research. Usage of GIS in our studies can give a broader view of the effect of environment towards health. For example, neighborhood influences on mental health of adolescents or spatial analysis of diarrhea cases in a particular district. We were very fortunate to be able to get intensive training in using this software and hope to be able to pass this knowledge to other students and colleagues in Malaysia.

# VISIT TO NIIGATA CITY GENERAL HOSPITAL

Besides looking at the Public Health aspect, we also had the chance to visit the Niigata City General Hospital to learn about the hospital management system in Japan. There, we met with the hospital director, who explained about the management system and all types of wards available in the hospital. We were taken to the Surgery Unit, Intensive Care Unit (ICU), Internal Medicine Unit, Cardiology and also Emergency Unit. There is also a special Infectious Disease (ID) Unit which serves to treat outbreak cases, especially Influenza cases. This ID Unit was built

in a very systematic way to prevent nosocomial contamination and provide safe isolation wards.

This short but valuable visit has opened our eyes to the different types of patients that come to seek treatment, as compared to a general hospital in Malaysia. The difference is mainly due to the fact that the dietary and environmental factors are somewhat different between the populations in these 2 countries. Therefore, we can see for ourselves that dietary and environmental factors definitely play a big role in determining the health status of a particular population.

# GERIATRIC CARE IN RURAL JAPAN

In order to learn about the geriatric care in a rural area, we spent 2 days in Koide. Koide is located about 140 km from Niigata University. On the 23<sup>rd</sup> January 2014, we were taken to the Fukuyama Clinic. We were accompanied by Prof Seitaro Iguchi and Dr. Suzuki Tsubasa. This clinic is located in the middle of a village in Koide and functions as a healthcare facility for the local residents.

In this clinic, most of the patients are geriatric patients aged 70 and above. They present with many diseases such as diabetes mellitus, hypertension and also pneumonia, which is quite common due to the cold environment in the area. The Fukuyama Clinic is vital to the residents because it is located close to their houses and this will enable them to get easy access of medical care from the visiting doctors. There is a pharmacy available in this clinic and it can supply enough medications for the patients. Therefore, patients do not have to travel far to the local hospital to get their medical supplies. Besides that, Prof Iguchi also does 'house-calls' where he will personally go to a patient's house to provide medical consultation if the patient is bed-ridden or too weak to go to the

clinic. During our visit, we were able to observe Prof Iguchi giving medical treatment and advice to a number of geriatric patients, including a 'housecall' patient. The patients looked very pleased to have him there to give them their necessary treatment.

Apart from visiting the Fukuyama Clinic, we also went to the Koide Geriatric Nursing Home. The objective of this visit is to learn about the Welfare Department in Japan and their management of the geriatric populations that are placed here. We managed to observe the daily activities that were done by the residents in the home such as light exercises and grooming sessions to maintain their health and appearance. The nursing home is a daycare center that has a lot of modern facilities for the usage of the residents. The premise and facilities are very well kept and maintained for the benefit of the people there.

### LECTURE SESSIONS

The first lecture attended was entitled "Type 2 Diabetes in the East and the West" by Prof. Hirohito Sone. The lecture described the epidemiology of diabetes as well as the treatment of the disease. Prof. Sone has published numerous researches on diabetes and in the session he shared some examples of interventions that can be implemented based on his research findings. According to him, the Japanese people have a low rate of insulin production and high insulin resistant problems. In other words, this makes the Japanese people easy to get diabetes. Fortunately, the Japanese has healthier eating habits such as less fatty, less sugar and less salt which lowers their risk of getting diabetes.

The second lecture was given by Prof. Akihiko Saitoh entitled "Paediatrics HIV/AIDS infection". Currently, there are 33 million people living with HIV worldwide. While Japan is a developed country, there is a small increase in terms of HIV/AIDS disease which mostly stems from sexual relations. In terms of vertical transmission, there are only a few cases and this is the result of an effective treatment and screening program in Japan.

The final lecture slotted for us was on "Tuberculosis and Current Research" which was presented by Prof. Sohkichi Matsumoto. This lecture touches on tuberculosis (TB) disease, especially the current situation in Japan and various studies to enhance our knowledge in addressing the spread of the disease.

# SYMPOSIUM ON GEOGRAPHICAL INFORMATION SYSTEM (GIS)

This symposium was held in the satellite campus and it involved various departments and fields where they present GIS application. This was a very interesting session where GIS can be viewed from numerous different perspectives and not just in a healthcare setting. Among the interesting findings presented was the use of remote sensing, distribution of dental diseases and risks as well as the analysis of suicide cases in Niigata, which can be used by health professionals psychiatric or mental.

#### CONCLUSION

We have observed some differences in public health management system in Japan as a developed nation as compared to our nation. Certainly, there are various improvements that can be made in our country especially in terms of public health management and health promotion. Japan has a more receptive society when it comes to good health practices. We can see community empowerment is the method and focus in their health promotion programs.

Japan has more elderly population compared to our country. The level of awareness on aspects of nutrition and exercise are higher. Exercise among the elderly encourages them to socialize and stay active. It is important to ensure that they get a good quality of life and reduce risk or complications of diseases such as dementia, depression and diabetes. Elderly health is a field that needs further improvements in our health promotion programs.

In general, this program has opened our mind not only in regards to public health and GIS applications but also how invested the Japanese are in human capital development. We hope the knowledge we gathered here could be practiced in Malaysia, where the citizen may receive a better comprehensive health system as it is done in Japan.

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