
SPECIAL REPORT

Public Health Experience in the ‘Snow Country’ Niigata, Japan

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In the cold winter month of January 2012, two post graduate students from the Department of Community Health, Universiti Kebangsaan Malaysia (UKM), went on a two weeks field attachment with the Division of International Health (Public Health), Niigata University Graduate School of Medical & Dental Sciences (NU). This report is an account of our first hand learning experience about the public health system and culture in Niigata, Japan.

Famously known as the ‘Snow Country’, Niigata prefecture is approximately 350 kilometers north of Tokyo, in the middle of the west coast of Honshu island, facing the Sea of Japan. It borders on the east with Fukushima prefecture, which was badly affected by the great tsunami disaster in March 2011. Niigata has a population of two and a half million, of which 21.3% is above the age of 65. Niigata University is located in Niigata City, the capital of Niigata prefecture.

Learning objectives

This attachment was under the UKM-Global Student Mobility Programme (Outbound) and it was taken as an opportunity to improve the memorandum of understanding between UKM and NU. The objectives were to gain knowledge and experience in various public health issues in a developed nation like Japan. Specifically, we were interested to learn about the local public health programmes, the influenza surveillance system, public health programmes for the elderly

population, the Geographical Information System (GIS) and the Japanese culture in general.

The Division of International Health, Niigata University

Leaving Tokyo city by shinkansen, crossing a beautiful mountain range, introduced a stark contrast of snowy white winter prefectures of west regions of Honshu. On our first day at Niigata University, we had to walk across a snowy roadside to get to the Division of International Health. But the cold weather did not dampen our spirits as the warm welcome and gracious hospitality by everyone at the department really made one felt welcome. We were greeted by the head of department, Professor Dr Reiko Saito and Assistant Professor Dr Yugo Shobugawa. Later that morning, we had the honour of meeting Niigata University Dean of Medical Faculty, Professor Sugata Takahashi.

Various planned activities such as academic discussions and presentations, field visits and hands on experience had been successfully accomplished for the entire two weeks attachment. These were around Niigata City and also in the rural area, Koide. Overall, this educational visit was very well-regarded as we learned a great deal about the public health deliverance in Niigata, Japan as well as experiencing the admirable Japanese work and social culture.



Figure 1 Welcoming session, from right Prof Dr Reiko Saito, Prof Dr Sugata Takahashi, Dr Syaquirah Akmal, Dr Nizam Baharom and Assc. Prof Dr Shamsul Shah.

GIS Application in Public Health

Ever since Dr John Snow brilliantly mapped out cluster of cases in managing a cholera outbreak in 1854, the use of spatial data has become increasingly valuable in public health intervention. Fairly recently, the use sophisticated Geographical Information Systems (GIS) technology has become a much-loved modern public health tool.

With a GIS laboratory at hand, the use of spatial analysis in epidemiological research at the NU is common. When the tsunami disaster occurred in the neighbouring Fukushima prefecture, this practice was put to great effect. Dr Shobugawa and Dr Tsubasa presented to us the use of GIS during the immediate recovery process of the disaster, helping thousands of people migrating to various relocation centres in Niigata and other prefectures. The pattern of migration was also analysed, helping various authorities to be organized in such a large scale operation.

Another bright application of GIS was brought forward by Dr Jun Goto, who is the assistant professor at Radioisotope Centre, Institute for Research Promotion, Niigata University. By coupling spatial data with radioisotope readings in a single device, this new gadget has certainly enhanced the radiation clean-up operation from the nuclear power plant disaster, which still continues until today.

GIS technology has great potentials in public health practice, planning, and research. Incorporating epidemiologic principles and methods into spatial analysis could certainly facilitate health management in the modern era. We were lucky to have exposure and basic training at the NU GIS laboratory and we shall continue to further train ourselves back here in Malaysia.

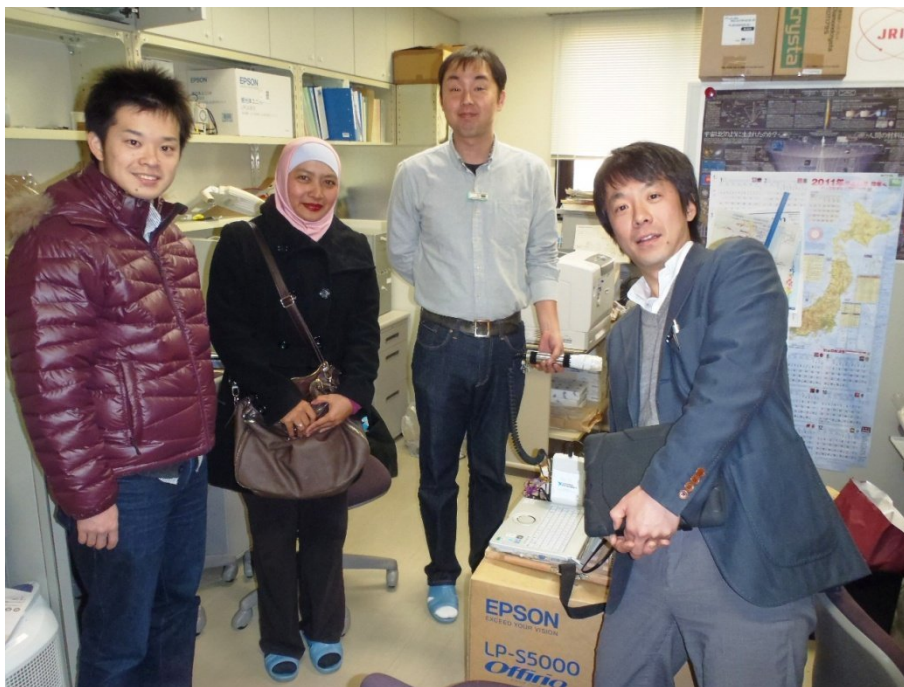


Figure 2 Dr Jun Goto (second from right) with his ingenious invention of integrated GIS radioisotope scanner.

Healthcare System for Geriatric Population in Niigata

With one in every five people in Niigata being over the age of 65, it was no surprise that care for elderly is given high priority in this area. Although conventional care by children and family members is still highly valued and practiced, the sharp rise of aging population increases the demand for well organised long term care programmes for the elderly. Social and health insurance systems are revised to cater for long term care. Many new nursing homes and day care centres were built with a considerably lengthy enrolment waiting list.

In Japan, old age is not a barrier to aggressive medical treatment. We visited the Niigata Municipal Hospital and Koide Hospital where the average age of in patients was around 70-75 years old. We were very impressed on how aggressive they were at treating the elderly with palliative care being somewhat the last option in health care plan. Perhaps this approach will aid the improvement in average life expectancy as well as compressed morbidity to increase the quality of life. In the rural area of Koide, where the winter

condition is harsh and unforgiving, the rural community clinics and home visits attended by community health specialists provided a much needed service for rural folks.

We visited two nursing homes in Niigata, one in the city and one in the rural area of Koide. Both facilities provide short term and long term stay, as well as day care services with transportation provided. We were very impressed with the high standard of care from highly trained staff and the use of modern equipment in the delivery of care. As we partook in some daily activities with the elderly patrons, the feeling of satisfaction and content was obvious among them as a sign of approval for such a high level of care. It seems that Japanese approach to grave issues of long term elderly care has struck a necessary balance between attaining funding and the cost of providing services. The rest of the world including Malaysia would watch with interest as the health care and the social welfare services for the aged society in Japan will continue to improve in the future.



Figure 3 Visit to the Sekiya Omoto en nursing home in Niigata city.



Figure 4 Together with Community Health Specialist, Prof Dr Iguchi outside a rural community clinic in Sumon Mura, Koide.



Figure 5 Enduring harsh winter condition for a home visit in the rural area.

Promoting Healthy Lifestyle to the Population

Like the rest of the world, Japan is experiencing epidemiological shift from infectious diseases to non-communicable diseases. With the chronic conditions such as hypertension, diabetes and obesity on the rise, the national and local health authorities have put up great effort in primary and secondary prevention strategies. We visited Niigata City Public Health Department, where we met its directors; Dr. Satoshi Tsukioka and Dr. Atsushi Tashiro. There, we were given presentations and visited the outpatient clinics, where various services including for chronic illnesses were catered for. Back at the NU, we listened to Professor Kazutoshi Nakamura who passionately believes in the benefits of traditional Japanese diet especially eating fish in combating non-communicable diseases.

A new Centre for Food and Flower Culture of Niigata City is one of latest effort in healthy lifestyle promotion by the Niigata Municipal authority. Here, cooking classes help many young Japanese ladies with the basics of healthy cooking. In true Japanese form, high-tech gadgets and fun educational tools were available to teach children and adults about healthy eating and healthy lifestyle. School children eagerly learn while playing with interactive toys about the basic source of food. At a community recreational centre, we joined Professor Kunihiko Shinoda and his wife who organized twice weekly exercise sessions and physiotherapy clinic. Many of the regulars are elderly, and it is embarrassing how they are physically a lot fitter than we are!



Figure 6 Keeping an active life: Prof Shinoda (front, right) at his twice weekly exercise sessions and physiotherapy clinic at a local community leisure centre.



Figure 7 Exercise session with a difference: Patrons were educated on the ergonomics of daily movement and how to reduce joint and back problems.



Figure 8 Educating them early: A young Japanese boy having fun learning about healthy eating.



Figure 9 Calorie counting: Teaching the public about well-balanced diet with an exciting interactive educational tool.

The Japanese government is recognising the threat of non-communicable diseases and is serious in putting primary and secondary prevention strategies in place. Although in Japan, health authorities are somewhat decentralised from the central government, we were informed that combating NCDs is one of the top priorities in almost all local health authorities. We could all

learn and emulate this positive approach if we are serious in improving the health of the nation.

CONCLUSIONS

The two weeks attachment in a wintery Niigata has certainly been an eye-opening and very educational field trip. The Japanese work and social culture are admirable, with a comprehensive approach towards healthcare needs of its population. Latest ideas and

technologies are adopted in healthcare delivery without abandoning traditional values. Even the harsh cold winter condition did not dampen their spirits of achieving greatness. We certainly have learned a lot and would take on the positive messages and qualities from this trip to continue to improve ourselves and Malaysian healthcare in general.

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