

**MD Anderson Cancer Center
Japanese Medical Exchange Program
2019**

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Personal Mission and Vision from JME Program 2019

●Mission

(Japanese)

薬剤師としてがん患者に対しゲノム情報に基づく適切な薬物治療の支援をする

(English)

To support appropriate drug treatment based on genomic information for cancer patients as a pharmacist.

●Vision

(Japanese)

ゲノム情報を活用した抗がん剤治療によりがん患者の生活の質向上を目指す

(English)

To realize the high quality of life for cancer patients through anticancer drug treatment using genomic information.

1. Purpose

Personal Purposes of Japanese Medical Exchange 2019 (JME2019):

Through the program in MD Anderson Cancer Center (MDACC),

1. Understand about the multidisciplinary cancer team and the role of pharmacists in cancer team in MDACC.
2. Find out why MDACC is the number 1 cancer hospital in the United States.
3. Clarify my mission and vision and develop my career plan as a pharmacist.

2. Methods

At the beginning

JME 2019 member are selected by "The 2nd Team Science Oncology Workshop" by MDACC and Japan Team Oncology Program at Showa University Hatanodai Campus from January 25 to 27 2019.

Participants

2 Physician, 2 pharmacists, 2 nurses

The training was conducted in MDACC from August 23 to September 27, 2019 on the following topics:

3. Program

The multidisciplinary team approach in cancer care in MDACC

MDACC has a job called Mid-level provider that does not exist in Japan. The occupations that correspond to mid-level providers are Nurse Practitioner (NP), Physician Assistant (PA), and Clinical Pharmacist (CP). These occupations support the work of doctors. Care providers strive to focus on patient education to provide patient-centered care.

A. Outpatient clinic

One example is outpatient treatment of breast tumor internal medicine that we visited this time. At first, doctors, nurses and pharmacists will share patient information on the day and discuss options for treatment interventions. When a patient arrives at the examination room, a registered nurse (RN), who is a regular nurse in Japan, first measures the vital signs of the patient and collects basic information such as symptoms of the disease and current internal medicine. Based on this information, the NP or PA will conduct an examination, extract the current problem, and provide

feedback to the doctor. The doctor then takes an enough time to explain the medical condition and treatment policy to the patient and decides a treatment method according to the patient's intention. CP provides patient education such as explanation of drugs and management methods for side effects as needed, such as when patients start chemotherapy or when regimens change.

B. Outpatient treatment center

I was very surprised that the number of beds in MDACC was about 700. However, after visiting the outpatient treatment center and outpatient clinics, I realized that treatment that I thought was impossible in an outpatient setting would be possible with systematic support. I will give an example in hematology. Patients who engraft after hematopoietic stem cell transplantation visit the Ambulatory Treatment Center (ATC) daily for 2 weeks after discharge. The doctor meets once a week, but the NP and pharmacist meet other days. After that, they go once every 2 days for 3 weeks and 3 times a week until 6 weeks. He must be in Houston for three months, but then he will be handed over to a local cancer doctor. I felt that a short hospital stay could be realized because the visit interval after discharge was fixed every period and there was careful follow-up.

C. Patients in MDACC

Many patients we met at MDACC were aware that they were members of team medicine. They were enthusiastic about studying the disease and how to treat it, and often asked medical questions. They also tried to understand clinical trials. We felt strongly that they were coming to MDACC to treat cancer. As for current medication, they can say the name of it when they are asked by medical staffs. I was surprised that they can answer the reason why the doctor instructed them to stop when they did not take the drug listed in the letter of introduction. After explaining chemotherapy to a patient in Japan, I always ask the patient "Do you have any questions?" Their reply is ends with a single phrase, "I don't know about the treatment, so I'll leave everything to you." Considering that medical treatment is the job of a medical staffs, patients have stopped thinking about treatment on their own. How can the patient live their own way to the end? What should we do to get the patient aware of participating in the treatment? During this training, I felt the hint was in patient education.

D. Patient education

The hospital has three libraries called learning centers. Patients and their families can

collect information from books and brochures on disease, treatment, and prevention for each type of cancer. Information about clinical trials will also be provided if requested. In addition, free patient classes were held and there were various programs to receive education according to interest.

At an outpatient clinic in the breast oncology department, it can take 40 minutes or more to inform the patient about the cancer. The doctor looked at the patient, snuggled up to the patient and the patient's family, and held the patient's hand silently. He built trust through verbal and non-verbal communication so that patients could accept it.

MDACC medical personnel are learning the following communication skills:

- Breaking Bad News -SPIKES-
- Addressing Emotions -CLASS and EVE-
- Discussing Medical Errors -CONES-
- Cultural Competence -BALANCE-
- Challenging Emotional Conversations with Patients and Families -BUSTER-
- Effective Communication in Supervision -TIMER-

Even if they understand it, it is difficult to put it into practice, but they used these skills naturally and promoted their daily medical care smoothly. I felt that the education of medical professionals was also an important factor in patient education.

E. Role of pharmacist

The pharmacy department is classified into three categories. The first is a technician who does not have a pharmacist license in charge of dispensing and aseptic adjustment. The second is Operational Pharmacist who has a pharmacist license checks prescription and adjustment of injections. The third is a CP belongs to the clinical department team and provides drug proposals to other specialists and education for patients. By subdividing and sharing the work of pharmacists in this way, the environment where CP can concentrate on clinical work was established. I felt that they were able to work efficiently. CP needs to complete a two-year resident program called PGY1 and PGY2. In the resident system, they learn knowledge in specialized fields such as oncology, nutrition, infectious diseases, emergency medicine, and palliative medicine, and at the same time develop problem-solving skills based on evidence, discussion skills, and presentation skills. They were responsible for pharmacological management and patient education by providing proper use of

medication, check of interaction, pharmacokinetics, management of side effect, guidance at hospital discharge. CP has a contract with a specific physician and can order a chemotherapy regimen by co-signing. RN and PA also have the right to order chemotherapy, but because it is necessary to adjust the dose according to laboratory values such as liver function and kidney function, it was almost always left for CP who is familiar with drug treatment.

F. Professor Ueno's lecture

Once a week, we received an opportunity to discuss with Professor Ueno about mission and vision, Core Value, and Leadership. We filled in an Individual Development Plan (IDP) sheet: how you have worked on the items in Education, Research, Patient Care, Administration, Self-Development, and Service. If we did not go as planned last year, we wrote what was the problems. We have described the goals for this fiscal year and what resources are necessary to achieve the goals. While it is necessary that goals in each field be consistent with mission and vision, it seemed very difficult to set each individual goal to go in the same direction.

Also, if you know the Core Value of a team member, you will know what the person is taking care of and it will be easier to communicate. I also learned that by avoiding options that violate my Core Value as much as possible, I could spend comfortably.

G. Janis's lecture

Janis gave lectures on communication, Leadership, dealing with Difficult Conversation, Self-Awareness, Teamwork, Career and Life. I learned that it is difficult to take a leadership in a team when we don't know about ourselves well. Leadership is not only for people in limited positions or positions, but it is necessary for teamwork that everyone recognizes and carries out the style of a leadership suitable for that person.

H. Mentorship

I got the opportunity to be instructed by two Mentors, Neelam and Melvin, CP. I regularly interacted with Mentor and brushed up mission and vision. I was very convinced by Neelam's words, "It's important to be interested in the specialty of one disease, but a pharmacist is a drug specialist and needs a generalist's perspective". Even if you are familiar with cancer treatments, patients often have other diseases as well as cancer. The doctors also heard that there are cases where prescriptions are difficult for non-specialized drugs, so I wanted to have a wide range of drug knowledge so that pharmacists who know medicines can make proposals.

4. Results

A. Team Project

As a summary of this training, we were divided into teams A and B for presentations. We present mission and vision of Team A.

●Mission

To improve patient's satisfaction in oncology outpatient clinic through multidisciplinary collaboration

●Vision

To optimize medical care for cancer patients to improve their self-care management skills and make them actively participate in their treatment by offering information and education from multidisciplinary team

Recently in Japan, the waiting time for medical treatment is long, but the conversation and consultation time with doctors are very short. More than half of patients talk to doctors in less than 10 minutes. In addition, patient satisfaction in outpatient treatment is lower than in-hospital care. (Ministry of Health, Labor and Welfare 2017 survey) On the other hand, the satisfaction level of patients who received outpatient chemotherapy at MDACC is as high as 80%. In MDACC, outpatient treatment through multi-professional collaboration was very fulfilling, taking a completely different style from Japan. This time, Team A focused on improving Japanese outpatient clinics, the theme of which could be considered through MDACC outpatient clinics.

The problem with outpatient clinics in Japan is that doctors have many roles to play and have little time to talk to patients, making it difficult to communicate properly. Also, there is little time to examine physical findings. Nurses spend time on non-specialty tasks, such as guiding patients to the laboratory and reserving patients, and have limited time to interact with patients and their families. Most hospitals do not have pharmacists in outpatient clinics, so it is difficult to suggest prescriptions in advance, and there is no opportunity to talk with doctors, so it may not be possible to explain according to the doctor's intention when delivering the drug.

The solution to these problems were to hire medical assistants to reduce the burden of medical affairs, and to leave the areas that other professionals are good at. We thought it was very important to create an environment where good communication between healthcare professionals was possible. Specifically, an interdisciplinary room was set up for outpatient clinics, and nurses, pharmacists and medical staff were

placed there to examine how to team up with doctors. In this case, because the treatment proceeds based on the consensus of the treatment policy by the team, it seems that there is little difference in the medical staff when explaining to the patient.

Through this team project, I was able to learn it is important to listen to the other people's opinions, ask appropriate questions, understand the ideas underlying the opinions, and that team members respect the team's interests rather than individual interests. The fact that each of the three team members was able to demonstrate leadership and create a single mission and vision was a great confidence in shaping future team medical care.

B. The Reason why MDACC is the No. 1 cancer hospital in the United States

In MDACC, work is subdivided according to occupations, and a system is in place to increase expertise and concentrate on work. In addition, they have introduced mechanization in the field that machines are good at, enabling efficient operations. The background that the environment has been prepared is that has always continued to discuss the problems, consider and implement improvement measures, and make corrections if it did not work. MD Anderson President Peter WT Pisters, MD, MHCM says, "The No. 1 ranking carries with it the responsibility to be a leader in the cancer field, and we are continually striving for improvement." I felt that the current MDACC was created by observing problems from various viewpoints and conducting thorough factor analysis.

C. Leadership as a Pharmacist

It is important that pharmacists have a wide range of drug treatment knowledge as generalists and accumulate knowledge in specialized fields. Pharmacists provide pharmacokinetics, drug interactions, side effect monitoring, and management knowledge and information to other medical professionals such as doctors and nurses to use drugs appropriately. I thought that the ability of pharmacists could be utilized by improving patient adherence and improving self-management skills through patient education.

D. Career Development

Before this training, my mission and vision were abstract. I learned that to achieve something, it's hard to do it if you can't imagine it clearly. Narrow down the most influential areas by setting the maximum impact targets you want to achieve in your career and applying them to the impact range and strength parameters. Helped to

clarify the abstract mission and vision more clearly and create more detailed and familiar goals. Generally setting goals and dreams, we consider whether we have the ability, whether we have the money, whether it is feasible or impossible. With the advice that they were unnecessary at first, I came up with a lot of ideas and finally decided in one direction.

5. Prospects

I thought that the medical system in MDACC was reasonable. One of the reasons for this is that business has become more electronic and mechanized, and work was efficient. Because of the presence of technicians, pharmacists work only for pharmacists' job, so enough time was secured for communication with healthcare professionals and patients. In addition, in Japan, how pharmacists in hospitals are engaged in drug treatment other than dispensing operations is gradually spreading in Japan, but in MDACC they were recognized by other medical professionals and patients as well. It was clear what the pharmacist wanted as a medicine specialist and what the pharmacist could offer and give back. In Japan, I felt that it was necessary to introduce a technician and mechanization so that a pharmacist could make the most of his skills as a professional.

In MDACC, continuous improvement activities were conducted through factor analysis. A system that continuously improves the quality is necessary when considering the survival of the organization as it changes every day. When setting goals, we started by collecting data, analyzed them, compared them with the current situation and problems at the current stage, and set the goals after specifying what was necessary in the future. In daily life, it is difficult to create an opportunity to set goals by following such a process because of daily work but create a system that can continuously perform improvement activities according to changes in the times and environment I think that is important.

I personally feel that it was a very good experience to be able to participate in this training, which is still in the developing stage of the 4th year of the pharmacist. I would like to keep in touch with mentors and JME friends I met at JME and make efforts toward mission and vision.

6. Acknowledgements

I would like to thank everyone from the bottom of my heart for their help and support for JME program 2019. Especially, I would like to express my sincere thanks to Dr. Ueno who guided us from before to the end of the program and Dr. Joyce Neumann,

Ms. Janis Yadiny and all other US mentors who guided us at MDACC. My mentor Ms. Neelam K Patel and Mr. Melvin Rivera were always thinking about me and gave me a lot of valuable advice. Mr. Fueki, Ms. Marcy Sanchez, and JME 2018 members supported us from before the beginning of the program. I also thank many organizations and individuals for their kindness and support for the program. I would also like to express my gratitude great JME 2019 members.