

DIALOGUE

Physical therapy in the new era

Hideyuki SAITO,¹ Kumiko TERAYAMA²¹President of Japan Physical Therapy Association²Vice President of Osaka Kawasaki Rehabilitation University*Key words: physical therapy, rehabilitation, history of physical therapy, community-based comprehensive care, education system*

(Terayama) We are looking forward to hearing opinions from the new president of the Japan Physical Therapy Association (JPTA). I, Vice President of Osaka Kawasaki Rehabilitation University, will start the interview entitled “Rehabilitation in the New Era” with great honor and expectation. President Saito, first of all, I would like to congratulate you on becoming the 9th president of the JPTA in June this year. I know that this is a tough job, but I hope that you will manage to lead the association. Please give us a brief introduction to your personal history including why you have become a physical therapist and what motivated you to enter the physical therapy field.

PROFILE OF THE NEW JPTA PRESIDENT, HIDEYUKI SAITO

My first encounter with PT was “Introduction to Physical Therapy” by Dr. Isao Nara

(Saito) Thank you very much, Dr. Terayama. I entered the Kanazawa Medical Technology Junior College, the first national junior college for physical and occupational therapists in Japan in 1985 as one of a seventh-class students, which has reorganized to be the Faculty of Medicine at Kanazawa University. When I graduated from high school, I was facing some many difficulties how to decide my occupation in future. I played basketball in high school, and I was thinking of becoming a physical education teacher. However, I felt I was not tall enough, so I was interested in a job like a trainer. At that time, I went to a bookstore in my hometown in Ishikawa Prefecture and had a chance to pick up a book titled “Introduction to Physical Therapy” written by Dr. Isao Nara. I learned for the first time the occupation of physical therapy. Due to my financial situations, I enrolled in a national university in my hometown, Kanazawa, thinking that it would be close to what I

wanted to do; the tuition was not so expensive, and I could graduate in three years to get a job. I wanted to work and be independent as early as possible. My main motivation was that I could definitely get a job and obtain qualifications in three years. After graduating, I worked at a local neurosurgery hospital for nine years and acquired various experiences. Then, I entered the graduate school of the University of Tsukuba while working at a large hospital that was about three times larger than the previous one.

(Terayama) “To learn while working,” was a common pattern at that time.

(Saito) That is right. When I was in Kanazawa, I took a course at the Faculty of Social Welfare of the Buddhist University and learned a little bit about social welfare, which has become useful today. At Tsukuba, I was given priority for graduate school research, and the laboratory was very understanding of my situation, doing research while working. I completed my two-year master’s degree and four-year doctoral degree in the public health laboratory. Since then, I have been engaged in clinical activities at the hospital and have worked with about 220 staff members, including physical therapists (PTs), occupational therapists (OTs), and speech therapists (STs).

(Terayama) That was a large hospital.

(Saito) It was a hospital that taught a certain education level and was willing to conduct research, clinical work, and community activities. The chairman of the board of directors of the hospital also aspired to make a Japanese Mayo Clinic or a mecca for rehabilitation in Japan. He gave me a lot of support. While I was working very hard, I happened to meet Dr. Isao Nara, who was mentioned earlier, and he encouraged me to become a director of the JPTA.

(Terayama) Then, that was your motivation to become a director of the JPTA.

(Saito) That is right. In fact, I received a lot of encouragement from various people, but in the end,

I was convinced by Dr. Nara's skillful invitation and became a director of the association.

(Terayama) At that time, you were working on the master and doctoral courses at the University of Tsukuba, and you must have also done a lot of clinical work at the hospital. Could you tell us about the details?

Opening a hospital, clinical practice, research, and management

(Saito) At the hospital in Kanazawa, I was doing rehabilitation work mainly with stroke patients. The director of the neurosurgery department offered me a research question on the brain plasticity in clinical practice. To put it simply, the question why a patient suffering from paralysis improves. When I went to graduate school, I had nine years of clinical experience, and I wanted to study brain science. I had thought about going into basic science, but I thought it would be too demanding for me as a working person. I wanted to conduct research using data from patients in a clinical setting and looked for an environment where I could do so. At that time, the Tsukuba Hospital was a very large hospital that conducted many surgeries, and many stroke patients had undergone very aggressive treatment. During my master's period, I was engaged in research on how cerebral blood flow and metabolism would be changed by non-invasive physical therapy programs using the early prototype of what is now called near-infrared spectroscopy. During that time, I conducted research while performing clinical activities. I was the only worker in the rehabilitation department there, so it was as if I had opened the rehabilitation department by myself. While doing research, I also evaluated patients and taught my assistants. Gradually, PTs, OTs, and STs started to join the department, so I had to do a lot of clinical and research works while teaching young people.

(Terayama) That is a lot to take in, but it has been a good experience.

(Saito) Yes. Now, I think that I was given the opportunity to do something that I could not have done, even if I had wanted to. In the doctoral course, physicians told me that it was impossible to do that kind of research, so I decided to focus on functional prognosis prediction. My laboratory was in the Department of Genetic Medicine, and although there were papers on genetic polymorphisms and life prevention, there were no papers on functional prevention, so I conducted research on this topic and wrote my dissertation on genetic polymorphisms and func-

tional prevention in first-episode stroke patients. It was a study of actual patients, and I asked doctors and nurses to collect blood data, and I was trying to conduct a genetic diagnosis in graduate school. At that time, the number of PTs and OTs gradually increased to 40, 50, and 100. Before I turned forty years old, I had a very interesting experience working on the education system during the day.

(Terayama) It was a wonderful experience. Around the age of 40 is when we are at our peak, and I think you were very energetic in your activities, simultaneously managing the opening of the department, doing research, and dealing with patients. I think that was partly thanks to Dr. Nara.

(Saito) Yes. I also think that having Dr. Hitoshi Ota in Ibaraki was a significant factor. I often hear your name from him. I still have a good relationship with him, and he has been good to me.

(Terayama) How is he doing?

(Saito) He has a little hearing difficulty but healthy and active. I was inspired by his innovative mindset of "if it does not exist, make it."

(Terayama) You originally have that quality in yourself, don't you?

(Saito) Maybe. I do not know if I am a contrary person. Even in graduate school, I was told that novelty is important and that you cannot graduate from a graduate school if you are doing what others are doing. Physicians told me that it did not matter whether I was a physical therapist or a physician when it comes to research and that a physician would never come up with an idea that a physical therapist does. It gave me confidence in my identity as a therapist. I have been applying this conviction to my clinical practice until now. During my graduate school days, I could make sure what I had done in an environment tossed about by physicians, nurses, and other multidisciplinary professionals, allowing me to be confident. I feel that going to graduate school while doing clinical work is very helpful in many ways, such as understanding the difference between study and research. I agree with Dr. Ota's advice.

(Terayama) That is wonderful. Rehabilitation professionals (PTs, OTs, and STs) need to have enough clinical experience, face patients, deal with various patients, discover clinical science, summarize it, and present it. At the same time, struggling and working hard in multidisciplinary collaboration would be a great foundation for success. I had the same experience. As you had multi-professional and clinical experiences while doing clinical research, you were able to become the president of the JPTA. Dr. Hi-

toshi Ota is a doctor whom I love and respect, and he forms a good team with Dr. Nara. Dr. Ota is working with Dr. Masashi Sawamura on community rehabilitation and prevention, and I have been working with them for a long time.

Becoming the president of the JPTA

(Terayama) Following the former president, Ichito Handa, you will play a major role in the future. By the way, how old are you?

(Saito) I'm 54 years old.

(Terayama) You will work for the association for a long time. I have high expectations for you. What kind of work have you been doing since you became a board member?

(Saito) I worked as the director of the Lifelong Learning Department before becoming a board member; thus, after I became a board member, I continued to work as an executive director and managing director in the Lifelong Learning Department. After that, during the reorganization process, I served as an executive director of the same department for two or three terms. In 2018, the hospital in Tsukuba was handed over to a junior staff member, so I was transferred to the association and became a full-time director. The previous President Handa and I were full-time employees of the association, so I held the position of director for total management and support in the second half. From my second term, I was fortunate to be allowed to serve as the vice president, and I was able to observe President Handa's hardships, methods, and way of life.

(Terayama) You have been well supporting President Handa, I think.

(Saito) I wonder... To tell you the truth, I was not acquainted with President Handa until then. I heard that Dr. Nara often asked him why he had made me the vice president. In that way, I think I was able to learn about the activities of the association's clerks and what needs to be done in general by becoming a board member.

(Terayama) You seem to have experienced everything necessary to be a physical therapist.

(Saito) Probably, the more recent generations like mine now have a career where they can do things that you appreciate.

(Terayama) No, I am impressed by your wonderful experience. I would like to know if you are still a professor at the Institute of Global Education at University of Tsukuba.

(Saito) When I was in clinical practice, I was involved in robotic rehabilitation, which is very popular right

now, and I was connected to an engineering laboratory at University of Tsukuba in the area of rehabilitation using virtual reality (VR) and robots. As an extension of that relationship, I was added to one of the interdisciplinary experts for providing advice to graduate students from a rehabilitation viewpoint. I have not had much duty, but I have been doing this since 1990.

(Terayama) Do you still do it now?

(Saito) Yes. I do not have that many duties, but I do review and advise students on their presentations several times a year. I guess it is like being a clinical professor.

(Terayama) I see. Actually, when I was young, I taught part-time in the fields of special needs education and special education to undergraduate and graduate students in the Department of Human Sciences, so I was nostalgic about University of Tsukuba. I have a good understanding of your career. I would like to ask you to let us all know your aspirations, or rather, your immediate tasks and thoughts as the new president.

ASPIRATIONS AS THE NEW PRESIDENT

Summary of Japan's 50 years of PT history and the future system

(Saito) I am the ninth president of the association. Unfortunately, the first president, Dr. Fumio Endo, passed away earlier.

(Terayama) Oh, he passed away?

(Saito) Yes. He passed away at the end of the last year. We were surprised to hear the news of his death.

(Terayama) We did not know that.

(Saito) I believe that he had a fulfilling end to his life. I heard many stories from him when I met him once in a while. He had just said to me, "I am compiling my 50-year history, and I will show it to you soon." When I listen to the stories of the first president and former presidents who are close to me, such as Dr. Isao Nara, I think that the history of the JPTA has grown over the past 50 years. However, the more I listen to them, the more I feel that there are still some more things that have not been resolved based on the original ideas and principles.

(Terayama) Some? It seems there are a lot of things to be resolved.

(Saito) Yes. There are a lot of things that I would like to discuss at another time, but there is one thing that I would like to settle once and for all, even though it may not be realized. After that, I think we need to build both a foundation for the next ten years and a

new structure. Specifically, we are in the process of organizing the projects that were conducted until last year, and the annual plan has not yet been finalized. However, I believe that we should improve the overall quality, because a mixture of good and bad in the education field is an issue. It may sound rude, but I personally think that it is necessary to ensure the quality of education rather than the number of therapists.

Quality improvement of 190,000 physical therapists in Japan with an average age of 34

(Terayama) The number of PTs has increased, hasn't it? It is a big issue that you have to improve the quality of 190,000 physical therapists.

(Saito) It is a big issue. We must think throughout pre- to post-graduate education; otherwise, it will not go well. On the one hand, I am optimistic that there will inevitably be a natural order or a shakeout. I would like to create a system that meets the needs of society. On the other hand, I think it is important to change the systems and structures, which have remained unchanged for more than 50 years, to make them more suitable for the current situation. In order to do this, we naturally need to have the ability to appeal to society, and we also need to solidify the operation of the organization within the association. I think there are many issues to be addressed. Internationalization and diversification are very big issues for the future, and we need to manage the organization in such a way that it can embrace the diversity of the association's members, whose average age is 34. In this sense, I believe that generational diversity will be very important.

(Terayama) The average age is 34, which is still quite young. You are envied by other professions for that.

They say it is nice to have so many young people.

(Saito) This has to be our strength. I think there is a tendency to think that having a large number of people is bad, and being young is not good, but on the contrary, I try to think that this is our strength.

(Terayama) As I recall, I was told something similar at one time that there was no future for a group of old people. However, it helped to have a lot of good people. You said that physical therapists are a mixed bag, but there are many young people with brilliant abilities. I am happy to see that there are many young people with wonderful abilities. I am also happy to see that there are many different ways of thinking.

(Saito) Thank you very much for your comments. Recently, I have been thinking that it is necessary to create a culture or a climate in which experience does not hold them back too much.

(Terayama) That is a lot of work, but it is good. What do you want to do for the time being?

Starting with the renewal of the lifelong learning system

(Saito) First, internally, we are renewing our Lifelong Learning system the next year. We want to put the new system on track. Externally, we are working on four-year education, or six-year university education. We hope to gain an understanding of all the related fields.

(Terayama) That has always been a theme for me as an academician. When I became vice president and, then, president of the Japan Association of occupational therapists (JAOT), I worked to establish a university for rehabilitation professionals. As a result of these activities, I was really happy when Kanazawa University established a junior college because even if it was a junior college, it was still a university. After that, Hiroshima University established the first four-year rehabilitation school in Japan, and I supported it in various ways, such as asking Dr. Nara to be appointed to the important position. Looking at this experience, it is clear that Japan needs more than just three-year vocational schools, and four-year schools are necessary. Are you seriously thinking about the educational reform of physical therapists in concrete terms?

(Saito) In order to seriously think about it, I think we need to study the history of what has been accomplished so far. It is easy to say, but I think there are many conflicts and opposition. There is the issue of a career path or the question of whether a four-year or six-year university education system can be socially viable afterwards. Perhaps there is a link between the reform of university education and the issue of having a viable career. To put it simply, there is the issue of independence for home-visit rehabilitation stations. We do not want to say that they should open their own business, but we would like to create something where they can make a good living with their own qualifications.

(Terayama) That is exactly right.

(Saito) As long as we do not achieve it, we will be talking only about theories and ideas.

EXPANDING FROM HOSPITAL TO COMMUNITY PHYSICAL THERAPISTS

(Terayama) To put it bluntly, I think it has some good aspects as a medical profession. It is becoming increasingly established as a medical profession to

perform physical therapy rehabilitation under the direction of a doctor in a hospital. It is also highly recognized by the public. However, “under the direction of a doctor” is, in a sense, frustrating. It has become a conflict, especially for highly competent physical therapists. We need areas where we develop independence from doctors for serving people. This is where the field of prevention comes in. The achievements of Dr. Handa and his colleagues suggest that prevention does not need to be directed by a doctor and that this is an independent field. If you start your own business, you will be able to work in a wide range of fields. I hope to be able to provide high-quality, fulfilling services that will please the public in those areas. If you are going to provide high-quality services and expand the scope of your business, as well as create an independent field, you need to provide education and human resources to meet these needs.

(Saito) You are absolutely correct. I believe that this is what you and others have been thinking since the beginning, so I would like to somehow make a head-on attempt.

(Terayama) That is good. We live in a diverse society now, so whatever you say may be accepted. I would like you to speak out loudly and take action. Even though it is simply a six-year system, there is now a wide range of education systems for physical therapists, including vocational schools, three-year schools, four-year schools, junior colleges, universities, and graduate schools. What is your understanding of this?

(Saito) At the moment, I think it is difficult for us to insist on this. We have been discussing this issue for a long time, but we recognize that it is difficult to make a move based on our thoughts. Therefore, I think it would be good if we could create a model, for example, an educational examination for medical doctors before they go into clinical practice, a kind of pre-post OSCE, or a kind of official OSCE two years or several years after graduation, which could be replaced by a mini CX or CBT. I think it would be good if we could have a model like that.

(Terayama) Yes, I like the strategy that gradually improves quality over a long period as lifelong education.

(Saito) I think we can come up with such a measure as an association. However, holding meetings with education teachers and vocational training school managers would take a lot of time, and it would be difficult to unite them due to their respective positions. I would like to create a model.

APPEAL OF PHYSICAL THERAPY

(Terayama) Changing the subject, please tell the young people about the appeal of physical therapy.

(Saito) As for the appeal of physical therapy, not only physical therapy but also occupational therapy and speech and hearing therapy, I think the most interesting part is that we can do something for people that physicians have given up on. If we do not give up on them, we can help them be satisfied with their lives. I think it is a very rewarding job. With regard to physical therapy, it has the power to give meaning to actions, which makes it a therapeutic technique. I believe it has the power to change people and communities. It would be interesting as they understand that a person’s reserved power can be evoked by giving correct external stimulation based on movement, kinesiology, physiology, and by indirectly affecting the internal organs and exoskeleton. I think that it is difficult to know how interesting it is at the level of superficial rehabilitation or massage.

(Terayama) Superficiality is the level of repetition in everyday life, is it not?

(Saito) We will never know how interesting it is at this level. I think it becomes more interesting when you dive deeper.

(Terayama) I saw the president of the JAOT, Dr. Nakamura, yesterday, and talked about how the work of OTs is invisible and difficult to explain. There are approximately 100,000 OTs in Japan, and most of them work continuously throughout their lives. Many of them are women, so they sometimes take a break from their work while raising children. However, they return to work. Even after retirement, they continue to work at daycare services and so on, so occupational therapy is an interesting and attractive profession that we can work in throughout our lifetime. What about PTs?

WHAT IS THE RETENTION RATE FOR PHYSICAL THERAPISTS?

(Saito) The retention rate is probably lower than that of OTs. More people seem to be transferred to other fields. Specifically, they work for general companies, research companies, banks, or in the healthcare industry. I have heard that some people are gradually changing their careers to those areas. In common with OTs, I think it is easy for women to work throughout their lives. In the future, women may be suitable for community-based comprehensive care and coordination. My point of view may be different from President Nakamura’s, but I have the impression

that more people work part-time or on a commission basis for the government throughout their lifetime, making good use of their qualification as physical therapists in various ways.

(Terayama) That is a great way to expand the profession's scope. This is the area of industrial physical therapy. There used to be massagers in some workplaces, but a physical therapist would be better.

(Saito) That is true. I also think that physical therapists are better than fitness trainers. I think this will promote self-help and mutual aid so that people with lifelong diseases or disabilities can properly invest in their own bodies and maintain their health without public insurance. The healthcare industry is a new area. In such a new area, a technique of populational approach will be reviewed instead of a high-risk approach.

(Terayama) That would broaden the scope of the profession and expand the field of activities for those with an outlook and a foundation in physical therapy.

WHAT ARE THE POSSIBILITIES IN THE SPORTS FIELD?

(Terayama) You mentioned at the beginning that you had a basketball background and that there was a time you wanted to play sports. The PT faculty at Osaka Kawasaki Rehabilitation University also teaches various sports. What is the situation of physical therapy in sports?

(Saito) I think the scope of the profession is expanding, and the presence of physical therapists in the sports field is increasing. However, when we look closer, many areas are shared by similar industries. There is no such thing as an exercise checkup or specific checkup that only physical therapists can perform. If we do not make a clear statement about the position of physical therapy in the field of physical education and sports, or if we do not institutionalize it like the former presidents of the JPTA managed to do in the field of care prevention, I feel that we will not be able to actually work there. In other countries, the sports field is definitely the domain of physical therapists, so I think we should do it. Japan is behind in designing a system to support it, so it will be a big negotiation. However, I have to do it.

FOSTERING REHABILITATION LEADERS IN COMMUNITY-BASED COMPREHENSIVE CARE

(Terayama) You have been practicing rehabilitation management, and I read somewhere that you would

like PTs to be active as rehabilitation managers. It is understood that rehabilitation professionals should come out of hospitals and work in the community in the current community-based comprehensive care system; however, there are not many people, and they do not have a united approach. There are places where rehabilitation itself is not being done. I would like to see the JPTA think about developing human resources to create rehabilitation coordinators and rehabilitation leaders in the context of community-based comprehensive care. What do you think about that?

(Saito) In fact, in anticipation of community-based comprehensive care, over the past few years, we have been conducting a lot of training to foster promotion leaders for nursing care prevention and leaders who can participate in community care meetings. Consequently, we have data showing that many PTs are participating in comprehensive projects in municipalities. I think they are working quite well in the form of part-time and dispatched PTs, but we need to create a system where people can make a living through such activities. We have to make that the CBR is not a voluntary organization but a viable one.

(Terayama) The nursing association is also making use of seniors, is it not? I would like to see OTs do the same thing. There are also going to be old men and women among PTs soon, so it would be great if they can be used as coordinators. They may not be able to move their bodies, but they can still talk.

(Saito) I feel like that is necessary in today's world; it is like a PT/OT/ST version of a local welfare commissioner.

(Terayama) In terms of being able to work freely, I think the doctors' instructions must be considered. I support home-visit nursing and care. In the case of nursing, they are slightly more independent, as nurses can communicate with attending doctors later as needed to seek their instructions. In this way, rehabilitation specialists in home-visit rehabilitation can maintain a relationship with the attending doctors as necessary. If the doctors can be utilized, I think it will be possible to make home-visit rehabilitation an occupation in which the private sector can participate. It is, now, especially relevant as the need is growing. How about this direction?

STRENGTHENING HOME-VISIT REHABILITATION

(Saito) I completely agree with you. It is not that I am denying home-visit nursing, but I think that if

home-visit PTs, home-visit OTs, and home-visit STs do not work side by side, it probably will not work. It does not matter if it is a comprehensive or specific instruction from the attending doctors, but I think it is absolutely necessary to have a trusting relationship with the doctors while receiving their instruction and to include our perspective under their instruction for home care in a broad sense. I think we have to think about this as a set of issues.

(Terayama) That is right. In the case of care workers, the relationship with doctors is very distant. It is difficult for them to understand medical terms, so there is a bit of a communication gap. However, nursing is not like that, and they work very closely with each other. In the same way, rehabilitation professionals have received medical education, so we have a high affinity and can build a good relationship with the doctors at the clinic. Therefore, I believe that if there are many highly reliable home-visit PTs, OTs, and STs, community-based comprehensive care will be safe.

(Saito) I have a strong determination to make that happen.

DEMENTIA AND PHYSICAL THERAPY

(Terayama) The current president of our university, Dr. Takeda, is an expert in the field of dementia. Therefore, we have a strong desire to develop human resources and conduct research at the graduate school, specializing in dementia and the prevention of cognitive functions. In addition, the former administrative director, Dr. Shigeru Kawasaki, started a psychiatric hospital in this area after World War II, and he has been involved in community medicine for a long time. Therefore, we would like to train people

for community rehabilitation and community services. We are now preparing a graduate school with this in mind. How does the JPTA view dementia?

(Saito) I believe that the theme of dementia is inevitable. Whether or not we approach dementia directly, I think that the keyword “exercise” has considerable evidence in the area of dementia prevention that I mentioned earlier. In addition, my research shows that even gene polymorphisms can predict the prognosis of Alzheimer’s disease. Therefore, environmental factors may be able to prevent dementia rather than genetic factors. I think it would be good to have physical therapists who can fight against dementia and prevent it. If you can train special physical therapists who can treat people with dementia well and respect their lives after they have been diagnosed, I think the community will really settle down. I have high hopes for it, and I would like to commit to it, if possible.

MESSAGE TO YOUNG PEOPLE

(Terayama) Thank you very much for your consideration. Finally, do you have any messages for the young people?

(Saito) I believe that our society will change in such a way that young people will be able to realize what they want to do. At that time, I believe that having this kind of professional qualification will be an advantage, so I would like you to start your life or your university life with ambitions, dreams and a broader perspective.

(Interviewer: Kumiko Terayama; Interview date: July 14 2021; This paper was translated by Kayo Matsuo.)