

International Seminar on

# Development and Challenges on Rehabilitation and Tasks in Countries of the Western Pacific Region

- World Report on Disability -



February 18, 2017

National Rehabilitation Center for Persons with Disabilities  
Japan

(WHO Collaborating Centre for Disability Prevention and Rehabilitation)

**This report is available to read on a website of the Center**  
**<http://www.rehab.go.jp/english/whoclbc/seminararc.html>**

## **Program**

**Time & Date :** 12:30~17:00, February 18 (Sat.), 2017

**Venue:** Tokyo International Forum (3-5-1,Marunouchi,Chiyoda-ku,Tokyo,Japan)

Facilitator: Rikio Shimamura, Director, Department of Planning and Information, NRCD

12:30 ***Opening Address***

Yoshiko Tobimatsu, President of NRCD

12:40~ ***Keynote Lecture***

**“Me Again : Rehabilitation in the Western Pacific Region”**

Darryl Barrett, Disability and Rehabilitation Technical Lead, Western Pacific Regional Office, WHO

13:15~ ***Presentation***

**1 “The Challenges of Walking Free from Disability”**

Josephine R. Bundoc, Consultant, Department of Rehabilitation Medicine, University of Philippines, Philippine General Hospital  
Program Director, Walking Free Program, Physicians for Peace Philippines

**2 “When Self-management met Rehabilitation in Hong Kong”**

Peter King-kong Poon, Deputy Chief Executive Officer, The Hong Kong Society for Rehabilitation

**3 “Development of Rehabilitation Facilities in China and Effort of CRRC”**

Limin Liao, Professor and Chairman of the Department of Urology, China Rehabilitation Research Center

***break***

**4 “Disability and Rehabilitation in Korea-with a focus on Health Related Rehabilitation-”**

Boram Lee, Head of Division of Public Health and Rehabilitation, National Rehabilitation Center, Korea

**5 “Home-based Rehabilitation in Yokohama City: the past 30 years and next decade”**

Toru Takaoka, Deputy Director, Yokohama Rehabilitation Center

**6 “The Status of Persons with Disabilities and Rehabilitation Today in Japan”**

Yoshiko Tobimatsu, President, NRCD

*break*

15:55～ ***Discussion among presenters, Q&A***

Facilitator: Akio Koide

General Manager of Policy Planning, NRCD

16:55 ***Closing Address***

Setsu Iijima, Director of Rehabilitation Services Bureau, NRCD



Opening address Yoshiko Tobimatsu



General facilitator Rikio Shimamura



Discussion facilitator Akio Koide



Discussion



Closing address Setsu Iijima



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## ***Opening Address***

**Yoshiko Tobimatsu**

**President**

**National Rehabilitation Center for Persons with Disabilities**

Good afternoon ladies and gentlemen. Thank you very much for joining us today. Fortunately, it's not too cold but thank you very much for joining us despite on a holiday. Today's seminar is organized by National Rehabilitation Center for persons with disabilities as a WHO collaboration center for disability prevention and rehabilitation. The theme of the seminar is world reports on disability which was published by WHO in 2011.

The purpose of this report is to analyze and to make recommendations on people with disabilities from global perspective. And this report also aims to promote the UN Convention on the Rights of People with Disabilities enacted in 2008.

The world reports stipulate that the rehabilitation is important for disabled people to participate in education, work and community life, and they also say that rehabilitation empowers people with disabilities and their families to live in the society. Today, we have this great opportunity to have Mr. Darryl Barrett of Western Pacific Regional Office WHO to give the keynote on the comprehensive idea on rehabilitation that WHO states.

Followed is the presentation by the experts and professionals on rehabilitation from Korea, China, Hong Kong and the Philippines to share the situation in each country and region. From Japan, Yokohama City and NRCD will present the situation in Japan.

As you may all know, the environment on the prevention of disability and rehabilitation is significantly different among the countries and regions of Western Pacific Regions. It is true that there are some differences in natural environment whether it is in an island country or in a continent or mountainous or surrounded by sea, or have far warm or cold climate, economical condition. However, it is also true that each country is working hard on the prevention of disability and the rehabilitation and still faces many challenges.

By having presentations, from presenters who actively work in the field on the practice and on rehabilitation in each country or areas and through a discussion, we would like to explore the measures to make persons with disabilities able to access to the rehabilitation they need. I hope this seminar will be fruitful to all of you so that you can take what you learn to your daily activities. Thank you so much.



## ***Keynote Lecture***



## ***Me Again: Rehabilitation in the Western Pacific Region***



***Darryl Barrett***

Disability and Rehabilitation Technical Lead,  
Western Pacific Regional Office, WHO

### **[Biography]**

- 2016 Current position
- 2015 Adviser to the Australian Disability Discrimination Commissioner, Australian Human Rights Commission, Sydney, Australia
- 2011 Disability Inclusive Development Specialist, Department of Foreign Affairs and Trade (and the former AusAID), South East Asia and Australia
- 2008 Regional Coordinator/Regional Manager, Technical Unit, Handicap International Regional Office, Middle East
- 2010 Masters of Public Law
- 2007 Bachelors of Law
- 1996 Bachelor of Occupational Therapy

### **[Summary]**

Disability is often associated with rehabilitation services. Many people with disability require rehabilitation services to address barriers in society and functional limitations. This includes older people, temporarily injured people or people living with chronic illness. The general population as well as people with disability benefit from rehabilitation services and assistive technology, however currently in the Western Pacific Region there are significant unmet rehabilitation needs.

Ministries of health are central to the development of quality rehabilitation services for all people, and in particular for people with disability. The WHO Western Pacific Regional Office is supporting ministries of health to build more inclusive and accessible people-centred health services, including rehabilitation services, as part of the continuum of care. This presentation will highlight the importance of rehabilitation as a health strategy for all, benefiting the whole population throughout the life course.

## ***Me Again: Rehabilitation in the Western Pacific Region***

**Darryl Barrett**  
**Disability and Rehabilitation Technical Lead,**  
**Western Pacific Regional Office, WHO**

Good afternoon everyone. *Konnichiwa*, I did have ‘*ohayo gozaimasu*’ ready, but that’s ‘good morning’ and I can’t use that now, but I will say *konnichiwa*. It’s a real great honor to be able to speak before you today. I’d like to say off the bat, thank you very much to the National Center for Persons with Disabilities here in Japan and President Dr. Tobimatsu and all her colleagues for convening this meeting to get us all together to talk about rehabilitation.

I’ll also say welcome to colleagues here from the region who are also coming from our collaborating centers of WHO, without the commitment and the engagement of our collaborating centers, it would be very difficult for WHO to do the work that we do.

I’m conscious of the translation today so I’ll try and slow down but I do get a bit excited, so if I’m going too fast, somebody put your hand up if the translation isn’t coming through.

It’s quite exciting also to be here in Japan because it’s been almost 20 years since I last visited Japan, and technically it was only a stopover during a flight to London. But that stopover was on a trip that I was taking from Australia to London to work as an occupational therapist at the Royal London Hospital in London. Even though I had a stopover in Japan and I only stayed near the airport, it was quite significant because many Australians who venture off for their two-year working holiday experience in the UK, I was taking my first trip overseas through Japan to start my work as a junior occupational therapist in the UK.

So it’s quite fitting that we are here in Japan almost 20 years after I first passed through Japan on my way to work as an occupational therapist. I’d previously worked as an occupational therapist in Australia very briefly but since working in the UK, as a therapist, I have worked in a variety of settings including working with people with psychosocial disability in a criminal setting doing psychosocial rehabilitation. I’ve worked in pediatrics, in burns, I’ve worked in ergonomics and medico-legal settings. I’ve worked in community hospital and private settings. And I’ve worked for the Australian government in a policy role and most recently, with WHO in the regional setting.

And I want to highlight that because often when we talk about rehabilitation we can forget the incredible scope that is covered by rehabilitation. Often we think about people with a physical impairment or we can have a very narrow focus on rehabilitation. But rehabilitation is really about addressing functional limitation

regardless of the health condition behind it. So on my current role, just to share a little bit about what I do on a day to day basis. Essentially the region you see on the map is my office. That essentially is where I work supporting governments like the government of Japan, the government of Korea, the government of Malaysia et cetera, to make their health services more inclusive of people with disability and to strengthen access to services like rehabilitation for people in their countries.

So today, I don't speak to you as a clinician, I don't speak to you as a policy maker, and I certainly don't speak to you as an expert because I think we are all experts in a different way, we all have capacity to influence and we all bring a particular experience to the work that we do. I believe that when we are engaged in rehabilitation services, often the expert role which is typically the rehabilitation practitioner, needs to be balanced with the expert role of the individuals that we are working with. So we need to balance that with the expert experience that people with disability or people with a health condition are experiencing themselves.

Now, I've been engaged in rehabilitation for quite a long time and I've learnt the importance of not taking yourself too seriously. And I mean really, how can we when, our tools of trade often include things like an over toilet frame or a long handle reacher or my favorite, a sock gutter. Now I'm not making light of them for any negative reason, but I simply say that I didn't always see the value that rehabilitation professionals play in supporting the lives of people with disability. And I think that it's important that we start to recognize the value that rehabilitation professionals play in supporting the participation of people with disability.

I wasn't always one of the students who studied occupational therapy knowing that, that will be my calling in life, knowing that, that is the most important thing that I needed to do with my, with my career. I can even remember the first days that I was at the university and the tutor asked all the students what they, why they were studying? And many people were saying, "Well, you know, my aunt is an occupational therapist." or, "I wanted to help people." I really didn't have a good answer because I wasn't looking for anything inspirational. It was probably a bad mistake because she then focused on me a lot more during the years while I was at the university. But she needn't be worried because I became Treasurer of our OT association and President of our student body in the last year. And I grew to understand the incredible value and power of rehabilitation to support people to participate.

So, the point I'm making or hoping that I can make is that rehabilitation professionals, managers and policy makers, we don't always see the value that rehabilitation can make in terms of the positive change that we can, that we can make for people in their lives. That's what I want to focus on a little bit today and that is change. And that we as rehabilitation professionals create change every day when we work with the people that we work with. Rehabilitation professionals are change agents, which means that we facilitate a transformation when people have experienced circumstances that they don't want to remain in.

I see us as rehabilitation practitioners, policy makers and managers, as creators of improvement in the environment or supports for the individual that can assist them to change their lives for the better. And we assist people in a process to transform themselves and their environment. So, essentially we have the ability as rehabilitation professionals to transform lives, to transform the ability for people to participate. I think that's powerful and I think that if we apply that in a health system, it becomes even more powerful.

So, because for many of our patients or our clients or the people who use rehabilitation services, because we facilitate change or we facilitate this process of change, we help people become themselves again. So when I say "Me Again" what I'm referring to is, whatever concept of yourself that you have, rehabilitation professionals can help you become that. If you experience illness or injury and you are looking to improve on your, on those circumstances, we as rehabilitation professionals can support that transformation.

Now, and it's important also to recognize that who "Me" is, when I say "Me Again", is a very personal thing, you know, it doesn't mean that I'm going to be whole again or I'm going to be super fantastic or I'm going to be all these incredible things. Who I am again, what it means to be me, is a very individual and personal thing and that's the other power that rehabilitation professionals have. We are very intimately connected with our patients or clients. We visit their homes, we understand their daily routines, and we work with their families. And so understanding what makes them "Me Again" is an incredible privilege that we have as rehabilitation professionals.

We should feel proud of our profession because the origins go back to ancient times. We know that the ancient Greeks and the ancient Romans used movements and used exercise to treat ailments and treat conditions that we can equate to many non-communicable diseases today. We know also that Hippocrates, the father of medicine, talked about curing ailments by physical activity and by manipulation of the joints. The basis I guess of modern day physiotherapy goes right back to the ancient times, and we should be aware of that because rehabilitation is gearing itself up to a forward looking future. But we need to know that it's not a new phenomenon that we go back centuries to ancient times, and it wasn't only the Greeks and Romans, it was also the, the Hindus and the Chinese, as we discussed this morning and the Japanese.

Now Amatsu Therapy for example is an ancient Japanese therapy I'll call it, which similarly looks at movement and manipulation. Which again has carried forward to where we are today in many rehabilitation professions that look at body movement exercise and function in terms of restoring health. So today, I've discussed a little bit about where we've come from as rehabilitation professionals, I'll talk a little bit more about that. I will also talk a little bit about the identity of disability in rehabilitation and also look at rehabilitation in the Western Pacific Region.



So, while I've mentioned that, the earliest beginnings of rehabilitation were with the Greeks and the Romans and ancient Chinese and Japanese. It was really in the 19<sup>th</sup> century in the Sweden and the US that physiotherapy for example, really kicked off and got its start. Similarly, and then later on in the 20<sup>th</sup> century in Australia and UK and New Zealand. And similarly, with occupational therapy, the earliest 20<sup>th</sup> century saw nurses and psychiatrists and physicians and social workers come together to realize that using occupation can help treat people with particular health conditions and help them get back to where they were. Then in the mid-1900s, it was neurological disorders that created speech difficulties that we saw as the catalyst for speech or language pathologies. And then if we look at the Orthotists and Prosthetists, we go right back to ancient Egyptian times and look at through the Middle Ages to where we are now in the 20 – 21<sup>st</sup> century.

So, while we can link a lot of these beginnings to ancient times, the catalyst for the modern-day rehabilitation professions really, really were the result of World War I and World War II. You had many people returning from war, returning from battle that were experiencing acute and chronic illness and injury that their families and their communities, and their nations were not equipped to help them facilitate to get back into the lives that they, they were leading before they went off to war. So, it's really the result of world wars that saw the modern beginnings to rehabilitation specialists that we see today. People needed assistance in walking, in communicating, in self-care, in just being able to participate.

Now parallel to the outcome of the war, we saw outbreaks of disease like polio. And polio provided an opportunity for physiotherapists and orthotists to really show their value in supporting people to be able to participate by providing rehabilitation or, orthotic devices. Rehab is grown in the last century in response to a real need among returned soldiers and those affected by war and as a response of disease outbreak and illnesses. Now while this, while this response has provided a strong foundation for rehab professionals, we can't afford to have rehab viewed as something that responds to an issue. We need to look at rehab or rehabilitation as a forward-focused strategy.

We already do that in so many ways when we think about how we engage with people, our clients or our patients to actually get back into the lives that they want to get back into. Whether it's work, whether it's education, whether it's just self-care or mobilizing. What I'm referring to really is that we as rehab professionals need to promote ourselves that we are part of a profession that is forward thinking and forward looking and that support people in being able to participate. And we can often think about rehab as a, as a service that helps people deal with the limitation or helps people deal with an impairment. But instead we need to flip this because we'll always have impairments; we will always have health conditions that contribute to disability.

So, there will always be an opportunity for rehabilitation professionals to be part of a process that facilitates that change, that transformation. And that supports people on their journey of transformation, from the negative impacts of a health condition to being able to participate in whatever life roles that they decide are important. It's even more crucial now in the post-2015 development agenda that rehabilitation is a forward-focused strategy. Because we have the opportunity to promote rehabilitation as the means to achieve the Sustainable Development Goals. The SDGs, the Sustainable Development Goals as you already know, are 17 internationally agreed development goals that eyeing to reduce hunger, to educate populations to support economic development and employment to address peace and security.

At the heart of the SDGs is equity and leaving no one behind. And in order for us to really address that we have to think about who are these people that are being left behind? There are often people that aren't able to participate to be included in development processes. And often people that aren't able to participate, are people with disability. People that because of a health condition or an impairment, come across certain barriers in the community and because of that interaction between their impairment and the barriers that exist in society, they are not able to participate and they are the ones that are left behind. And rehabilitation professionals can play a key role in ensuring that people aren't left behind and that people are not excluded from being part of the SDG process.

I can't stress enough really the importance of rehab professionals and policy makers, and managers aligning our work with the SDGs. You know, at the end of the day, the SDGs are about equity and about bringing people together in a development process. And for many people this would be impossible without rehabilitation. Absolutely impossible, people will continue to be excluded and left behind unless rehabilitation is valued and seen as a mentor or as bridge to getting people from a place of I guess discrimination or non-participation to a place of participation.

In particular, for WHO, Goal Three is crucial because goal three is about health and it's about ensuring everybody has access to good quality health. And as a health strategy along with health promotion, prevention, treatment and palliative care, rehabilitation is for everyone, okay?

At some point in our lives all of us will require the intervention of a rehabilitation service or rehabilitation professional. We may not ever call ourselves a person with disability, but we will require at the services of rehabilitation. Whether it's physiotherapy after an acute knee injury or you know, maybe you've gone skiing in Niseko or somewhere and you've twisted your ankle or twisted your knee, you'll go and see a rehabilitation professional. You might not be a person with disability but you do require the services.

You might require speech therapy after you've had a stroke and you have difficulty swallowing or talking. As you get older, you might want to stay living at

home but the home environment is dangerous and increases your risk of having a fall and if you have a fall and you are over 70, chances are you'll go in a hospital because you've had a fracture. And then if you are in hospital, you might not make it out of hospital because you'll get an infection. So, rehabilitation professional serve a crucial and key aspect of maintaining the health and the quality of peoples' health care. Whether it's in a prevention capacity or whether it's in a treatment capacity.

I guess what's also important to mention here is that even though I believe that rehabilitation, for rehabilitation to move forward it's important that we see it as a mainstream in health service. We can't underestimate the value that the Disability Rights Movement has had in supporting the promotion of rehabilitation professionals and rehabilitation services. And the Disability Movement today is largely a result of the Civil Rights Movement from the 1960s in the US. Where people with disabilities were saying, "You know what, I've had enough of not being considered a citizen. I've had enough of not being part of everybody else's country." In order for some people in the Disability Rights Movement be able to participate, rehabilitation professionals really took prominence. Because for them to get a seat at a table to be able to exercise a voice quite often, rehab played a crucial role.

We can see that if we look at the various models related to how we view people with disabilities. First it was the charity model which really viewed people as a people with disability as people we needed to care for or you know, people that were special and really needed some special assistance because they couldn't do anything for themselves. And then we saw people with disability from a medical perspective which said that because they didn't act or look or think normal, whatever normal is, but because they didn't do what the things that we did, they were broken and they needed to be fixed, okay. And it said that it wasn't the environment it was the person that had the problem and we need to fix the person.

Neither the charity model nor the medical model really looked at issues around the rights of people or dignity around people with disability even being able to participate on an equal basis. And so, the social model of disability was born and it essentially said that the issue is with society, is not with the individual. That you know, there's not really a normal person out there, that we are all different in a different way but often it's the barriers in society that prevent people from participating. Not because I sound differently or I move differently that it's the barriers themselves. And the social model also encapsulates our understanding of disability from the perspective of the convention on the rights of persons with disabilities. And the convention is our latest core human rights treaty and it pretty much says that people with disabilities should be given the same rights as everybody else. In order for some people to attain those rights and claim those rights, rehabilitation professionals are needed to help bridge that gap between people with long term impairment and overcoming the barriers that exist in society.

Now, I've talked a little bit about the convention, a little bit about the social model and the fact that the barriers can exist whether they are physical barriers to

the environment they might be legislative barriers that don't recognize the rights of people with disability, they might be policy barriers that don't put in inclusive health systems in our processes. Or they might be financial barriers that don't recognize the added cost of disability. They might be discrimination and stigma. Regardless of that rehabilitation professionals have a role to play in breaking down those barriers and helping to bridge some of those gaps. Disability under the International Classification of Functioning disability in health, is very clearly articulated as a combination of a personal factors, the environment and a person's health condition. And so WHO classifies disability as a complex interaction of activity limitation, impairments or participation restriction. And often we think of disability the same as a health condition but it's not.

Disability is a complex interaction and even though you can read what's up on the screen there which talks about body structures and body functions, activities and participation, when you combine all those together, it is quite challenging compared to just dealing with a health condition such as a spinal cord injury. Because disability is not the same as a health condition, we have to take into account environmental factors where a person lives, where a person works. We have to take into account personal factors. Does the person live alone? Are they living in a community? What's their motivational level like? Are they interested in being independent and working again? And then of course the health condition is what plays into it as well.

Now the ICF, the model that I just put up there which looks at the inter relationship between health condition and personal factors and environmental factors, is important because it's echoed in the Convention on the Rights of Persons with Disabilities. The Convention really gives us an opportunity as rehabilitation professionals, to look at how we can align our treatment goals, our professional processes and the future of our particular profession with the UN Convention because at the end of the day the UN Convention is about addressing participation barriers.

Each of us, rehabilitation professionals, are all about addressing participation restrictions. Often when we set treatment goals for example, for people to achieve certain goals and treatment, they'll often be related to whether somebody can participate in self-care activities or participate in school activities or participate in work activities. So, rehabilitation professionals are already addressing what's required in the UN Convention. And just in sort of summing up in the last few minutes; I want to spend a couple of minutes talking about the identity of disability or the experience of disability because while disability as it's sort of set out in the Convention talks about the interaction between people with impairments and barriers and then the resulting restriction in participation.

Disability is also a label that some people choose to wear or some people choose to call themselves a person with a disability, other people who may experience disability do not choose to wear a label as such. It's for various reasons and personal reasons; it doesn't really matter, but it's important as policy makers in particular that

we understand the difference that not everybody who experiences disability will put their hand up and say, "I am a person with disability". Which means that if we only think about catering services for the people who put their hand up and say, "I am a person with disability", we are missing out on including and developing a whole range of services for people who experience disability but don't label themselves. It goes back to my point about ensuring that we are able to see rehabilitation as a mainstream health strategy because as rehabilitation is seen as a main stream health strategy for everyone, we can also address disability as everyone may experience it even those who don't put their hand up and say, "I am a person with disability".

There was a meeting just last week in Geneva, and I want to just skip to a couple of points about that meeting so you'll see on the slide there. What happened was last week in Geneva, there was a Rehabilitation 2030 meeting which was an area of meeting, it was about a call for action?

Basically, WHO is now promoting that rehabilitation is seen as a mainstream health strategy for everyone which means that we need to be gearing our rehabilitation services just like we do with health prevention, health promotion, treatment services and palliative care. Rehabilitation needs to be included in there and there was a call for action for nine or ten particular aspects.

One of them was that the unmet need for rehabilitation around the world needs to be recognized particularly in low and middle income countries but the demand for rehabilitation services will continue to increase in light of the global health and demographic trends including the aging populations that we have and the increasing number of people that live with the consequences of disease and injury.

We also need to recognize that rehabilitation is an essential part of the continuum of health care, as I said before, along with prevention, promotion, treatment and palliation and we should therefore consider rehabilitation as an essential part of an integrated health service.

That rehabilitation is relevant to the needs of people with many different health conditions and those experiencing disability across the life span, that rehabilitation is an investment in human capital so it's an investment in populations that contributes to health, economic and social development and as an urgent need for combined global action by all relevant stakeholders including the UN, including member states, other development partners, community organizations and NGOs.

The nine areas of action that you see on your screen, really give some recommendations and some highlights of where member states need to address the gaps, the current gaps that are being indicated in rehabilitation currently.

I'm happy to talk about this maybe in the Q and A session where we have more time to flesh this out because this fantastic clock that I've never had before in any presentation which is tapping me on the shoulder with about thirty seconds to go. I

look forward to the discussion. There is a lot of development in WHO at the international level and at the regional level where we really are pushing that rehabilitation is viewed as a mainstream health service that benefits everyone and if it's integrated into health services, then the profile of rehabilitation will increase, the service of availability will increase not only for everyone but particularly for people with disability as well. So, thank you very much.

## ***Presentation***





## *The Challenges of Walking Free from Disability*



### **Josephine Robredo Bundoc, MD**

Consultant, Department of Rehabilitation Medicine,  
University of the Philippines, Philippine General Hospital  
Program Director, Walking Free Program, Physicians for Peace Philippines

#### **[Biography]**

- 1977~1981 Bachelor of Science in Psychology, University of the Philippines, Diliman
- 1981~1985 Doctor of Medicine, University of the East Ramon Magsaysay Memorial Medical Center, Inc (UERMMCI)
- 1987~1989 Physical Medicine & Rehabilitation Chief Resident, University of the Philippines, Manila, Philippine General Hospital (UP-PGH)
- 1991~ University of the Philippines, Manila
  - Associate Professor, College of Medicine
  - Consultant, Department of Rehabilitation Medicine, Philippine General Hospital
  - Head, Prosthetics and Orthotics Unit
- 1991~ University of the East Ramon Magsaysay Memorial Medical Center
  - Professor, College of Allied Rehabilitation Science
  - Associate Professor, College of Medicine
  - Head, Physical Medicine and Rehabilitation Section
  - Proponent and Faculty, Philippine School of Prosthetics and Orthotics
  - Member, Philippine School of Prosthetics and Orthotics International Advisory Board

In addition, holds other various posts of international or governmental organizations

#### **[Summary]**

The functional independence of persons with disabilities will be achieved through provision of affordable, appropriate and accessible prosthetic devices. The Physicians for Peace “Walking Free” Program developed a 10 year Road Map in response to the six challenges of topography, cost, data, professional training, local resources utilization and empowerment.

Whereas the focus was solely on prosthetics provision in the first 5 years, the presence of multiple disabilities and implementation of rights-based service gave birth to “Walking Free and Beyond” that expanded device provision to wheelchairs, white canes, hearing aids, orthotics with appropriate rehabilitation services (physical, occupational, speech therapy).

The collaborative public-private partnerships that paved the way towards sustainability of “Walking Free” and “Walking Free and Beyond” was made possible by persons with disabilities themselves who were actively involved from planning to implementation.

## ***The Challenges of Walking Free from Disability***

**Josephine Robredo Bundoc, MD  
Consultant, Department of Rehabilitation Medicine,  
University of the Philippines, Philippine General Hospital  
Program Director, Walking Free Program, Physicians for Peace Philippines**

Good afternoon. The Walking Free program is a partnership of Physicians for Peace Philippines and the Philippine General Hospital and it was enabled to render devices available to persons with disabilities, particularly amputees. When we started this, we wanted to start on the right foot so to speak, and we were looking for data but there was none in 2005. We relied on national estimates which stated that 420,000 Filipinos needed assistive devices; 340,000 of them reside in rural areas where 127,500 are actually poverty stricken. They were the focus of the Walking Free program.

Anchored on the ICF, we designated our Walking Free road map which would run for ten years divided into three phases. The phase one is Evaluation which would identify the stakeholders, look at the feasibility of collaboration and assess the barriers after which we would do phase two implementation by providing solution, innovation and adaption and then work towards phase three sustainability by ensuring community reintegration and empowerment of our beneficiaries. The strategies that were done for the road map are the following; For Evaluation, we did missions and stakeholder assessment, for Implementation, resource networking, development of satellite training and service centers and pushing for policies; For Sustainability, we forged public and private partnerships and made sure inclusion and community participation.

Evaluation was carried out through island missions. The mission one was amputee screening in the community and then we bring what we measured and casted to the Philippine General Hospital Prosthetic Shop and did central fabrication. Then we go back to the community and we fit and align the prostheses during mission two. From 2005 to 2007, we saw 1,031 amputees and the 946 of them never used a prosthesis. The amputees and caregivers said it was because they were expensive, services are inaccessible and a lot of them do not actually know what a prosthesis is. The service providers on the other hand stated that the equipment and the supplies were imported, technicians were limited in their skills and services were inadequate.

There were 85 who came with prosthesis but wanted their prosthesis replaced because they say the prosthesis were of poor quality and poor fit and the service provider said, "They had no certificate or formal training and they only learned how to fabricate through hand-me-down learning of skills."

So, we were faced with the first set of challenges of Walking Free which were: 1. absence of data, 2. high cost, 3. topography (we were 7,100 islands divided by mountains and bodies of water), 4. no local sourcing and 5. lack of professional training.

From these challenges Walking Free set its vision of locally applicable and globally acceptable devices. Our mission was functional return through our walks of life particularly those who are marginalized and our goal was provision of an appropriate, affordable and accessible prosthesis.

Since we were funded by an NGO based in the US, their strategy was to donate first world equipment to us but then our question is, “would this produce affordable devices?” They also wanted to introduce 21<sup>st</sup> century technology but then again, “would this be appropriate in the Philippines setting?” Last but not the least, they would want our technicians or trainees to go to the US or other Asian countries to do overseas training but our problem is a lot of Filipinos work abroad and never return so we may have the trained technicians but they are not available in the Philippines.

What Physicians for Peace USA did was to send the foreign trainers to the Philippines, where they stayed for two months three to four times a year and provided the training in the Philippines. In order to generate more funds and increase awareness, we did amputee walkathons and amputee climbs.

After six years, we were able to continue with 45 missions and distributed 2,352 prostheses only to be faced with a second set of challenges. We were struggling with funds and, we were faced with a lot of calamities such that we sometimes canceled the missions.

The mission team was employed by the Philippine General Hospital and we could not readily pull them out of their clinic work and sometimes when we are able to continue with the mission, the beneficiaries are not able to go to the mission site. As such, we had the problems in mission two of delayed fitting, even up to six to eight months after casting and measurement. Therefore, there was a lot of material wastage and our amputees were full of despair. Our greatest problem at the time was we were good at fabrication but we never had the workshops in the community to do the repairs. Our strategy to these challenges was to develop satellite centers and we were able to develop strategically one in Luzon, another in Visayas, and another one in Mindanao.

The trainees were trained in such a way that whatever they learned, they would be able to apply it at the community or grass roots level. They have skills which could adopt or adapt and they could creatively source materials locally that could be utilized for the components of fabrication of the prosthesis. This was coupled with research in the University so that whatever local materials they could source, we would be able to have evidence in terms of its viability and the outcome that is needed for our amputees. The basic core of the program is being emancipatory

because we always believed that it is the person with disabilities, particularly our amputees, who would really know what device is appropriate for them. So many of our trainees were actually amputees and now prosthesis providers, they also went into counseling and we had a PO nurse who joined missions to provide education for diabetic amputees. In order to facilitate the screening process with us based in the Philippine General Hospital and our amputees in the various islands, we were able to develop a cellphone application called Amputee Screening through Cellular Networking(ASceNt) together with the telecommunications company, Smart and an IT group of students in a University. It is very user friendly that even our PWDs were able to use the cellphone and the application to do their own screening.

The traditional amputee screening process required four steps. With ASceNt, we were able to do it in two steps with the first step being done via a trained volunteer who will input the data with photo in the cellphone. This data would be evaluated by the Walking Free team and then we just send a message and tell them if the patient is already ready for casting or measurement or would still need pre-prosthetic rehabilitation. Comparing the two types of screening process, the four steps is reduced to two steps. And this was very crucial because we were able to develop an amputee web registry which enabled us to let the Philippine Health Insurance Corporation(PhilHealth)create the first ever benefit package for persons with disabilities, the Z MORPH Package, which initially gave below knee prosthesis to PhilHealth members more than eighteen years of age.

With the creation of the University of the East Roman Magsaysay Memorial Medical Center Philippine School of Prosthetics and Orthotics(UERM PSPO)in 2010 they assisted us in operationalization and formulating the implementing rules and guidelines of the Z MORPH Package.The UERM PSPO likewise provided the needed training for the service providers. It was very good that sometime in 2010, the Asian Institute of Management looked into the sustainability of the Walking Free Program and they emphasized the fact that we could only be sustainable if budget allocation from the national to the local government units would be provided in an annual basis.

To ensure phase three which was sustainability, we utilized the PhilHealth initiative and formulated it into a stimulus package. We went to the various local government units and did local innovation for local health problems workshops.

Since prosthesis are being donated by private donors, sponsors or local government, we told them that instead of spending \$534 for only one beneficiary who is not a PhilHealth member, they can sponsor or pay \$55 for an amputee to be a PhilHealth member and their \$534 will not only benefit one amputee but will benefit seven to eight amputees. They found this very good such that public-private partnerships were now developed between the local government unit and the Department of Health, non-governmental organizations and investors. Thus, we were able to set up three more regional hubs; two in Mindanao and one in Visayas. But, what was very good actually about this, was the fact that we were able to scale down our missions. Most importantly, we progressed from Central Fabrication to Regional

Fabrication, thereby avoiding the material wastage, the delay, the despair of our patients and most importantly, we were not only fabricating but we were also doing repairs.

Because of this, PhilHealth further expanded the Z MORPH Program. It now included upper and lower limb prosthesis, spinal and lower limb orthosis and included rehabilitation services as part of the package. Now, since the PhilHealth package was only catering to those who are more than 18 years of age, UNICEF took the initiative of also providing benefit package to the less than 18 years of age. UNICEF did not only assist us in developing a package for mobility but likewise, focused on other assistive devices for hearing, for vision and for the developmentally disabled.

So we said, "We have now reached the finish line, we have now achieved inclusion and community participation for integration and empowerment of our PWDs but then, we very well knew that we still have other challenges to face and this is the challenge beyond Walking Free.

Right now, there are four challenges that we need to look at. One is despite the fact that there is a PhilHealth package, membership of persons with disabilities are still low. Second is awareness of the community and the service providers and the low utilization of the PhilHealth package.

Access to healthcare facilities with rehabilitation services is still very low and actually we need to look at providing the services at the primary level rather than at the tertiary level of care.

Although we have achieved community reintegration, we are still very low on access and an accessible environment that would allow transition to education and job opportunities.

But, we will move on because we are always inspired by our amputees as they will always tell us, "We should not lose hope because they only lost their limbs but not their spirit". Thank you.

## *When “Self-Management” met “Rehabilitation” in Hong Kong*



### **Peter King-Kong POON**

Deputy Chief Executive Officer

The Hong Kong Society for Rehabilitation

Hong Kong, China

### **[Biography]**

- 2014 Current position
- 2010 Adjunct Associate Professor, Rehabilitation Science Department, the Hong Kong Polytechnic University
- 2008 Director, Rehabilitation Division, HKSR
- 2002 Project Director, Health in Action Project (Chronic Disease Self-management Program)
- 1997 Senior Physiotherapist, HKSR
- 2002 Master in Business Administration (Public Service), University of Birmingham, UK
- 1998 Diploma in Health Service Management, Open University, HK
- 1983 Professional Diploma in Physiotherapy, Hong Kong Polytechnic

### **[Summary]**

“**Rehabilitation**” is a process that aims at enabling people with disabilities to reach and maintain their optimal physical, sensory, intellectual, psychological and social functional levels and provides the tools for them to attain independence and self-determination (WHO). “**Self-management**” on the other hand, is about engaging the person with chronic disease in activities that protect and promote health, monitoring and managing of symptoms and signs of illness, managing the impacts of illness on functioning, emotions and interpersonal relationships and adhering to treatment regimes.

This presentation is about the integration process of the “self-management” approach with the community-based rehabilitation program for people with chronic disease by the Hong Kong Society for Rehabilitation. Starting as a new concept to Hong Kong in 2001, the US-based Chronic Disease Self-management Program (CDSMP) has gone through its piloting, localizing, validating, scaling phases and final being successfully integrated into the main stream primary health care services in Hong Kong and as an integral part of the local disease management protocol. The program has been proven effective in affecting individual’s health status, self-efficacy and social limitations arising from disability.

## ***When “Self-Management” met “Rehabilitation” in Hong Kong***

**Peter King-Kong POON**

**Deputy Chief Executive Officer, The Hong Kong Society for Rehabilitation**

Good afternoon. It's truly my honor to be here today and thanks again for the NRCD for the kind invitation. We heard Darryl talk about rehabilitation and there are some really good concepts that we have heard. What I'm trying to address the audience today is about something that I have been working in the past 20 years and on a term that we've often heard but we might not really understand what it means and the term is “self-management”.

What I'm going to do in the next 20 slides is to talk about the concept and about some of the work that we have been undertaking in Hong Kong and with positive outcome. I hope this will add on to the list of things that we could be thinking about or doing in future for rehabilitation. I don't think I need to talk much about the definitions of rehab because I think Darryl has already mentioned about it. But I'd like to point out that for people to really get rehab or to get back to the society, there are multiple dimensions. So, it's not only physical but also it is intellectual, psychological and social functions and we all know that.

We also know that even though we're doing a good job in the hospital, in our clinics, we couldn't just rely on healthcare professionals because the patients will go home one day and we need them to have that capacity. Well, I suppose we all know that but it's not easy to do. We still have patients staying in the hospital for months and months and months or sometimes for years.

The services in hospitals are excellent but yet, they have encountered problems to prepare the patients going home. Often, the healthcare professionals don't know what's available and may have limited idea or resources to prepare.

The concept of “self-management” comes in nicely. Self-management is actually a process. It's very much value-driven: to recognize that even though I have disability or even I have a chronic condition, the responsibility doesn't only go to the doctors, to the nurses, to the PT/OT. But, it's me as a person with a condition which is part of me too. I need to acknowledge that and be responsible for that as well. Talking about disability and about chronic conditions, although there are many things that one could not do but obviously there are lots of things we can do too. It's a matter of values, it's a matter of whether I want to manage my own health, my own body.

So, I'd like to highlight in this slide; is the word 'manage' or 'management'. Or to expand a little bit further; self-management. It's not others who manage me but me as a person to self-manage in terms of my physical side, psychological, my emotions. Even though I have a disability, it doesn't mean I've become the king of the family

and to yell at everybody, but to have good relationship to communicate as well as with the healthcare professionals to work together with them so that we actually build up that partnership relationship. When I go back to work as a worker, I also need to communicate with my colleagues, with my boss so that I can stay in that job. So, self-management is multidimensional.

Looking at this slide again, I find lots of similarities between rehabilitation and self-management. So, I'm not going to repeat but I think there is a strong role for self-management to play in the field of rehabilitation simply because of the commonalities. We looked at a common commonality, we find optimum functioning, independent living, self-determination, participation, sense of well-being. So, there's lots of things in common. So obviously self-management is part of rehabilitation or if we look at the tools for rehabilitation, it could be a very, very important concept or tool to really put that into action instead of staying as a very conceptual or theoretical framework.

Again, Darryl was talking about ICF; we are all familiar but again, ICF is excellent but how can we implement that? So where is self-management? Can self-management be a part of ICF? I'd like to come back to my organization. I come from the organization called the Hong Kong Society for Rehabilitation. We have been around for about 60 years. We start off very much with a medical model and in the past 20 years, we moved into the community-based model or the social model that Darryl just addressed. And then, we're looking at the next 10 years. Probably we'll integrate both of them. I don't think social model is better than the medical model or the other way around. Obviously, we still need our OT/PT, our healthcare team so we're not going to quit our job. But yet, I'm sure that the patients can play a strong role so that we can work together.

In the past few months, I have been working closely with my management team who are all energetic and passionate on community rehabilitation to review what we have been doing in the past 5 years and to look beyond into the future. We figured out that there are many things we could improve and do but to put them into perspective, we need to look at our priority and planning. People with disability, they have the strength, they have their potential, they have their dignity. It's our role as a health care professional to work together despite of our different professional background, i.e. doctors, nurses, social workers, OT/PT, etc to embrace these values and to use different interventions and means, to really to put a person in the center of care to address their needs and to identify their potentials and engage them in the rehabilitation process. In the other work, let them be part of the rehab process, be part of our team and be part of the society.

Apart from Hong Kong, my colleagues also work in Mainland China. They have been providing CBR for almost forty years now and have been providing training to the professionals as well as setting up different programs in the orphanages, in different parts of Mainland in particular the rural area. I wouldn't say much about this because my director is here, Monique Kuo, in case you are interested; I'm sure



she can talk more on that. And I'd like to draw you to this very complicated model which I showed Darryl two months ago.

It's actually a WHO framework and it's complicated; I'd like you to look at the outcome. PWD or a person with chronic conditions; I think we all wish to have good health outcomes or good indicators but how can we do that? So, if we look at the center part of this great diagram, you see the interactions between the patients, the healthcare providers and the community. We know interactions, communication is important but yet if we look at the two big circles on two sides: the right hand side is the healthcare team, the left hand side is the patient, the carer and the community. In reality, there might be gaps in between that might on the other hand, affect the outcomes

People working in hospitals doesn't know what happen in the community and vice versa. So, when the patients stay in the hospital, we are pretty much sure what we need to do. On the other hand, when the patient want is upon discharged, so all of a sudden we find it very difficult because we have no idea what's happening. So, really to have a good health outcome, is not only the responsibility of the health care providers in the system, it's also the communication that matters; having that bridge or linkage between the mainstream medical system and the social welfare system as well as the community is important for success. To achieve this would be excellent but still not enough. If we don't have policy, it's not going to go very far. So, on top of this diagram, we have positive policy.

We were eating in a great restaurant last night and we were talking about smoking cessation. So, I know smoking is prohibited in the public areas now here in Tokyo as well as other major cities in Asia. We are adopting a good policy; no smoking in public places and I count it as a very, very important strategy to put health in the forefront. Good public health policy is very important in the prevention of diabetes, hypertension, stroke and other non-communicable diseases. That explains the important interactions between individuals and the health care providers; between the system and the policy that need to be in place.

And this is just a very simple illustration that tells again what I've been talking about. In another UK model and I like to draw your attention, even though we are talking about people with disability or people with the chronic diseases, not everybody requires the same level of care and services.

I would say 70% of people, they are relatively stable, what they need is just minimal support. What they need is the acknowledgement that they are responsible for themselves, and they can work according to the good advice from the doctors, from the nurses, and to actualize "self-management". So, I think this diagram gives us a very illustration on how to match the self-management concepts into different level of care. The good thing about it, if we put this right, we can save about 50% of our healthcare utilization.

When talking about health care budget. I think this is very attractive. Back to my organizations again about 20 years ago, we started off a new project “CRN” - which the short form of Community Rehabilitation Network. We have six centers under CRN at the moment. In the CRN Team, we have social workers, PTs, OTs, nurses and other professionals. Through the interdisciplinary approach we have adopted, we work together to empower persons with disability including chronic health conditions self-manage their disease and/or impairments and to support them to be their own manager.

Looking at the strategies of CRN, we start from individual empowerment to collective empowerment. Starting from me to acknowledge that I have disability, I have chronic conditions, learn to accept instead of denial. Then, to go further to learn how to self-manage myself and further on, to help each other via mutual support. Last but not least, to get together to voice out the needs to the policymakers and hopefully, to influence the policy and for better changes. Ultimately, to have better treatment in the society and more opportunities for PWD.

In the last sentence of my slides, there is a slogan: “Empowering people with disability to live a fulfilling life”. The goal of Rehabilitation is not only for living, but to have a satisfying and fulfilling life. Again, this further illustrate what we do in HKSR.

I think I have covered most of the concepts. The photos which I show here are the self-management programs and trainings we have been providing in the past 10 years. Over the years, apart from providing services in Hong Kong, we also have had the privileges to provide self-management related trainings to different organization or counterparts in the region, namely Mainland, Macau, Singapore, etc.

The Chronic Disease Self-management Program was started in the Stanford University. I have received my training and become a trainer in CDSMP in 2001. There are hundreds of studies on the effectiveness of CDSMP and the findings are very consistent so far. In general, people that have gone through the self-management programs showed enhancement in their self-confidence or self-efficacy, the self-rated health status improved. Although the disabilities remained, they feel better, stronger in living with the health conditions and have improved health outcomes.

Take diabetes for example, the HbA1c level dropped significantly after the program and patient’s adherence to healthy behaviors also improved too. Often, we talk about exercise but seldom actually do exercises. But after they go through the CDSMP they actually do more exercises and their social limitations would be decreased, the length of stay in the hospital might be reduced and people usually have better emotion control too. Currently, we are providing different types of self-management programs in Hong Kong. We have self-management programs for stroke, for Parkinson’s disease, for the caregivers of Alzheimer’s disease, diabetes, hypertension and etc. .

Although the interventions could be different, but their core elements are very similar. We are addressing different issues with the same core value, ie. to encourage people to become their own self-manager and to live and enjoy a healthy life. Afterall, having a good habit is not only the knowledge, is not only the skill, it is the confidence that is more important. In most of the self-management programs, there are still knowledge and skills components, yet, the important part would be the goal setting, about formulating an action plan. Yesterday, we have been talking to a patient in here who is hoping to go home after rehabilitation process in the hospital is hoping him to go home, but yet, there's no confidence. So, we talked to him about setting short-term goals working out what it needs and then prepare him to go home. So, I guess about action planning, about preparation, about homework, about not people, others' homework is my homework how do I prepare to do the next day. The beauty of this program you see is it engages patients as a leader, as co-leaders. This is not a professional service, it is actually a partnership type of service. This says go further talking about even roles of different parties. So, the patients, the health care providers and the organizations.

Locally, we still do research and this research came out last year about our diabetes program as I mentioned the outcome, the clinical data is very prominent very encouraging, so we are very pleased that what we are doing is actually showing a good outcome. The pictures here show some of the works that we've been doing in the past 10 years. We provide group trainings, to the patients, to the users. So now we have two leaders, so we're not using PowerPoint and such. So everything is very low tech. We go to a room and we can't deliver this service as far as, as long as the leaders got the training. We go to different regions to provide trainings, this is Macau in 2012 training up a group of healthcare providers to provide the services and in Macau again.

And interestingly in the Hong Kong setting, we also provide training to the traditional Chinese medicine practitioner, so they need these concepts as well. And after the earthquake in Sichuan a few years back, we went to tend to, to provide training there as well. We bring up the local leaders, the therapists to conduct self-management programs. And again, we have a partnership with CDC of the Mainland government and then, we provide training to different region, to different provinces, and the training is actually the pilot programs in different areas in the country. And the setting is such very simple, straightforward, no high-tech, but down to earth self-management training and last but not least, we're acting as a bridge to bridge the health care system as well as the community.

So, that we can work together forming this quick partnership and I'm going to conclude. My conclusion is very simple. It is this line. Self-management is a missing piece, that can be considered to fit in this great concept of ICF or maybe to help to push it a little bit further from a very good concept into practice, into implementation, and my organizational game is a pioneer in a rehabilitation approach and we are still transforming our organizations. We are a WHO

Collaboration Center, an NGO. We are authorized training partners currently on self-management and we have resource help.

So, having said that we welcome questions and then in case we couldn't talk much today send me email and we can further discuss. So, that will be a reference and now, I have 10 seconds left. Thank you.

## *Development of Rehabilitation Facilities in China and Effort of CRRC*



***Limin Liao, M.D., Ph.D.***

Professor and Chairman of the Department of Urology, China Rehabilitation Research Center. Vice-chairman of Urologic Department of Capital Medical University, Beijing, China.

### **[Biography]**

1986 Medical Bachelor, The 3rd Military Medical University, Chongqing, China

1994 M.D., General Hospital of PLA, Beijing, China

1998 PhD., Medical School of Aachen Technical University (RWTH), Germany

2002 Current position

### **[Summary]**

Ever since the introduction of rehabilitation medicine, rehabilitation facilities of all levels have been established, including nation level, province level, city level and prefecture level institutions and community rehabilitation facilities. However, rehabilitation is a relative new discipline in China, and facilities are administrated by different government branches, there are many obstacles to be overcome in terms of standard, model, and management. The rehabilitation facilities are based upon great rehabilitation demands in China. Six types of rehabilitation facilities were established to cover these rehabilitation needs. By integrating internal factor and external influences, the strength, weakness, opportunity and threat faced by rehabilitation facilities are analyzed. Future recommendations are proposed from the perspectives of macroeconomic policies and institutions management for the development of rehabilitation facilities in China.

As the first comprehensive rehabilitation institution and an important rehabilitation facility, CRRC has been established since October 28, 1988. It contributes a lot to the development of rehabilitation in China from the aspects of providing comprehensive rehabilitation medicine service, providing systematic rehabilitation education and building international rehabilitation research collaboration.

## ***Development of Rehabilitation Facilities in China and Effort of CRRC***

**Limin Liao, M.D., Ph.D.  
Professor and Chairman of the Department of Urology,  
China Rehabilitation Research Center**

Dear colleague, ladies and gentlemen, good afternoon. At first, I would like to thank you for the invitation from Dr. Tobimatsu, and the invitation from NRCD. I am a neurologist and I'm happy to be here to talk about the development of rehabilitation facilities in China and the effort of the CRRC. I would talk about the three parts of companies; one is background, the second is strategic analysis, the third is effort of CRRC for development of rehabilitation in China.

First of all, I would talk about the background. As we know, at the moment in China, we have 85 million disabled persons. We also have the 185 million aging people that also have nearly 2,700 million patients with chronic disease. So, faced with such great rehabilitation need, China needs to speed up in building more rehabilitation facilities. In China, we have many departments of our government involved in rehabilitation. They included: China Disabled Person Federation (CDPF), Ministry of Health, Ministry of Human Resources and Social Security and Ministry of Civil Affairs and the Ministry of Education. So, among these departments of the government, the CDPF and the Ministry of Health take up most of the percentage. Under the umbrella of CDPF, we have one national center, it's called the China Rehabilitation Research Center. It's our center. We also have 29 provincial centers. We also have 93 state-level centers and have 2500 prefecture-level centers. So, this is under the umbrella of the CDPF.

How about the Ministry of Health? There's a huge number of these centers because they combine almost all the general hospitals, so the Ministry of Health requests the all general hospitals to set up with the department of rehabilitation, and the MHRSS also set up all the Work Injury Hospitals. For example, the Guangdong Work Injury Rehabilitation Hospital is a rare success case. And MCA also integrates rehabilitation with nursing homes. An education of a Ministry of Education also provides a special education, there are some special school. So, we also have some private rehabilitation facilities at moment. So, this is the situation at the moment in China.

The second part I will talk about is strategic analysis. At the moment, we have at the time, the advanced stage, for example after 20, more than 20 years they were implemented, the rehabilitation course in China has achieved great progress. At the moment, we 8,000 facilities this later come from the end of the 2015, and there are 1,500 facilities to be built. At the moment, we're finished with this three-level service network; acute, subacute and community-based rehabilitation, and we are

finished with a system of rehabilitation. We include there the rehabilitation department in general hospital, general rehabilitation center, the independent general specialized rehabilitation centers, community-based rehabilitation center, and family rehabilitation.

How about our weakness? Even if we have some progress but we many weaknesses. For example, we have we have not enough professional of rehabilitation, ambiguous definition of facility function, and underdeveloped service system. Generally speaking, rehabilitation resources is scarce, and also we have not enough government regulation and the financial support. However, we have the opportunity. For example, now our government increased emphasis on rehabilitation, and as we know, the Chinese economic growth is so fast and the society has developed well. At moment in China the government will performs the reform of medical systems. Maybe, this will provide the important support for rehabilitation work. We also have some threat. These threat come from the health problems, lack of standardization, irrational rehabilitation personnel structure, and unclear functions of medical institutes at all levels.

Third, I would like to talk about CRRC for the development in rehabilitation in China. As you know, China Rehabilitation Research Center was established in 1988 under support from many countries and many organizations, for example, from Japan. The National Rehabilitation Center, NCRD has given us great support. This is CRRC is the earliest and the largest Rehabilitation Institute in China. This is the oldest picture from almost 30 years ago. This is CRRC as conjoined with these departments. The first is the Beijing Bo Ai Hospital. This hospital has at moment 1,200 beds in this hospital, and it also included China Rehabilitation Medical Institute for research, including basic research, and also has the China Rehabilitation Engineering Institute. We have solved some engineering problems in this institute. We also have a School of Rehabilitation Medicine which belongs to Capital Medical University. We also have the China Social Guidance Centers. This responds for the guidance for rehabilitation for all China. So after almost 30 years of construction CRRC has developed into a large and comprehensive national rehabilitation center.

CRRC have many tasks. The first is to provide state-of-the-art rehabilitation and the medical service. For example, the disability rehabilitation, chronic disease rehabilitation, comprehensive medical care, and also another general medicine. The second task is China response for China rehabilitation resource development is training and education that includes three levels. One level is a higher education, the secondary level is rehabilitation therapist education, and on-service education. For higher education for rehabilitation, we have many international support. For example, from Japan, Hong Kong, Australia, Norway and America and so on. This is a very famous project. Maybe most of you know this project is called it JICA. This is in cooperation long time with the Japanese government, now this is in the second phase, this JICA project. Recently, we also set up the rehabilitation on-service training. This is called the long-distance education. It has acquired an innovative rehabilitation training system, they also get support from JICA project.

So, I would conclude to use these slides to explain our education systems, and at CRRC we have academic education. It covers for undergraduate courses and master degree courses and a doctorate degree courses. It is also PHD and a postdoctoral fellowship and this is academic education. Another is in-service education, for example, professional and technical training and the distance network education, and international certification training. The third task is to increase the international rehabilitation academic exchange. From this field, the most famous event is the Beijing International Forum on Rehabilitation. I believe most of you attend our annual meetings. This year we will continue this annual meeting in Beijing. This forum increases the exchange among different programs, and different organizations, and difference rehabilitation systems in different countries. So, it is a very good event.

CRRC saw that cooperation, international cooperation with, for example, Japan, Norway, America, Australia, Hong Kong and Korea, and at all that cover the medical, education, research, information, engineering, and management, and promote the development of rehabilitation in China. So, after development, for almost 30 years CRRC has almost finished construction of the rehabilitation institution and their personnel training, scientific research cooperation, the international medical activities, and the international rehabilitation academic exchanges that contribute significantly at the development of rehabilitation in China, and promote the rehabilitation in China. So, this is our CRRC, this is our old area. At the moment that we are getting new area, we closed to this old area. The aim almost is the same with the old area. So, I believe the CRRC will grow gradually and contribute more to development of rehabilitation in China. I also thank you all of you, especial for NRCD to support CRRC in setting off the development in past 30 years. To thank you very much.



***Disability and Rehabilitation in Korea***  
***-with a focus on Health Related Rehabilitation-***



***Boram Lee***

Head of Medical Care,  
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Ministry of Health and Welfare

**[Biography]**

2001~2006 Biology major, Natural Science Department, Ewha  
Womans University

2006~2010 College of Medicine, Korea University

2010~2015 Residency, Physical medicine and Rehabilitation, Korea  
University Medical Center

2016~ Current position

**[Summary]**

Over the years, there has been comprehensive effort toward the gradual expansion of rehabilitation services in Korea. Especially the policies for the persons with disabilities are becoming more inclusive in the sense that not only they induce more social participation of PWDs but also helping them to maintain a healthier condition throughout life.

In the future, the demand towards rehabilitation and health management services for PWDs will increase, as the population in Korea is aging rapidly. As the total population is aging, so is the disability population as the percentage of disability population over 65 years old is also increasing. Efficient chronic care strategy for the long-term is necessary as well as a promising financial strategy for the increasing needs.

## ***Disability and Rehabilitation in Korea*** ***-with a focus on Health Related Rehabilitation-***

**Boram Lee**  
**Head of Division of Public Health and Rehabilitation,**  
**National Rehabilitation Center, Korea**

Hello. First, I would like to express some gratitude to have me here, to speak in such a great event. My name is Boram Lee. I'm from NRC Korea. As a physician, I would like to talk about disability and rehabilitation in Korea with a focus on health-related rehabilitation, which is about to face a big change in recent years.

First, I would like to talk about and show a brief picture of disability in Korea based on a 2014 national survey and a 2015 white paper on persons with disability. The disability population in Korea based on the 2014 national survey was estimated to be about 2.7 million. The population is increasing steadily, but it's somewhat less dramatic than before because we think there is less, lower incidence of trauma and vehicle accidents and better medical care. The prevalence itself has also increased in about 10 years. It increased about 1% and we are expecting a little more increase in the future too.

Most of them are living in the community and 58% are men, and one characteristic is that 43% are over 65 years of age, so this is a very, very old population, super old population, I guess. So, this is a thing you have to face. If you look in the detail and the prevalence, the age when they're in their 70s, the prevalence is almost 25%. So, compared to the average it's very high. If you look at the causes, acquired diseases and acquired injuries made up most of them, and the type was mostly physical disability which includes spinal cord injury, amputations, and other neuropathies. Followed by brain injury and visual impairments.

The life of PWDs in terms of daily living, about half of them needed assistance, 15% of them were lacking help. Most of them who needed assistance were mostly those with autism, brain injury and intellectual disabilities, and most of the assistants were from their families. In socio-economic measures, the average monthly income and the graduation rate from high school and the percentage getting jobs was very low almost half compared to the general population, and yet they then needed additional expenses in about 75% of the population, about 1 to 50 US dollars per month. These included medical expenses, transportation and caregiver expenses mostly.

So, the demands are really changing over the years. Income security needs are still the highest, but over the years, medical security needs are increasing steadily. This is because of the aging and higher rate of chronic diseases in this population. For instance, for hypertension there is almost twice of what it is in the whole population,

diabetes is about three times the whole population, so this is a huge characteristic of what's happening with the persons with disabilities.

So, I would like to talk about the current status, and what is going under action right now for the development and rehabilitation in Korea. In terms of human resources, I think we have some rich resources right now. We have 1600 persons for medication specialists and PT and OT's consist of like 30,000 and 5,000 almost. Another 5,000 for the speech language therapists. We have a lot of rich human resources here. In terms of service delivery, there is a tendency toward provision in the nursing care hospitals, the long-term care hospitals. A lot portion of the healthcare provision is taken in these hospitals. It's a very unique characteristic in Korea. Most of these services are provided in Seoul, in Kanguido which is very close to Seoul, it's a region very proximate to Seoul. So, it's very not wide spread. It's very concentrated in a specific area, so this is becoming a problem.

For the public health care provision, we have six areas for regional rehabilitation center. By 2019, there will be another one coming with National Rehabilitation Center and Communities Rehabilitation. We are figuring to extend to the public health rehabilitation health service provision in the future. Along with this, we have 18 medical rehabilitation facilities in the community rehabilitation facilities. And the Ministry of Health and Welfare is for better quality healthcare. They chose to certify hospitals for the rehabilitation specialized hospitals. One of them is the NRC right now, and there are 10 hospitals since.

The CBR has been around for about 20 years in Korea. At first it started very small but now, in this year, 2017, the entire region of the nation is included. It's become mandatory to carry out the program in every center. The 254<sup>th</sup> center is all involved in this rehabilitation program. The fund is coming from National Health Promotion Fund and includes health promotion, disability prevention, rehabilitation and support program, and many participation programs.

This is an example why a patient might go under after an incident or accident. After the trauma center or general hospital, they will go to all sorts of different kind of hospitals and medical institutions in Korea. Most of them go to the long-term care facility. They stay there for like maybe one or two years. Or one of these chronic care hospitals or the 10 certified rehab hospitals or regional hospitals. Or some will just go right to the community. This is not that well organized, as we see. We need a better referral system to be organized in a very efficient way.

In terms of finance, most of the finance cost is covered by the National Health Insurance. But in the case of the PWD's, there's the higher portion of Medicaid benefit because of the low economic state. And the Rehabilitation Service therapy is covered by the NHI which is about 430 million per year, and also assistive devices are provided by the NHI, which now goes to \$50 million a year. And we also have a long-term care insurance which was inspired by Japan model for the elderly and for

PWDs also. And there is also support for rare and intractable disorders, and cochlear implants which is supported also by NHI.

In terms of assistive technology, the provision started in 1980. We started with the basic ones, orthotics, prosthetics and wheelchairs and now we are covering also the household goods and adaptive feeding devices and others listed here. As we developed the provision there was a need for the quality control of these assistive devices, so there were regulations concerning definition of assistive devices and science's system for the classification of orthotic devices. Since there are so many funds that provide to get the AT's, there was a problem about organizing an efficient way to provide the right AT for the ones who are in real need. So, we choose to have rehabilitation assistive devices for infrastructure construction project. By 2016 there was an act on support and promotion of assistive devices for the PWDs. So, they can organize the provision and also help the aftercare and quality control and managements afterwards in the provision.

This is almost the last part. I'd like to talk about the policies and laws. This all summarizes how it developed in Korea. The disability and rehabilitation. This is a very recent thing. It's only 20 years. It's only a fourth plan right now. It first focused on the inclusion of the PWD's in society and now it's focusing on the rights of the PWDs. There were a few very big actions, legislations, including act on long-term care insurance and prohibition of discrimination, and disability support pension which was a huge help for the PWDs.

Another very influential thing was an act on orthotics assistance for persons with disabilities which was enacted in 2011. Right now, there's a huge issue on the act on guarantee of right to help in this act in providing medical services for PWDs. This is really a new act and it's going to be forced by end of the year. We are working the specifics right now for the better system. So, this is a new law and first health-related law for PWDs. Its purpose is providing for matters concerning support for the guarantee of the right to help, and to establish a health care system, and guarantee of access to medical care for disabilities. It sounds simple but it's quite complicated. I'll show you in the following slides.

The background was as I mentioned before, the health issues in this population, because there were higher rates of chronic diseases and also adversity, and the subjected health condition was very poor, and depression experience were very high, so that was very deep need for some kind of health management. The current problem I mentioned before was that there isn't an efficient referral system at the initial stage. So, there's a low efficiency of medical rehabilitation care and also the chronic stage, there is insufficient to health management service right now so there needs to be disability support information about chronic care management.

So, this isn't a tentative idea of what is going to be for the chronic care delivery system. The health management portion will be done by the Central Rehabilitation Center and the Regional Rehabilitation Center and helped by the Community PWD

Health Support Center which will probably be in connection with the CBR I think. And were going to have some medical attendants for the severely disabled, and this will interact with the rehabilitation medical services which will provide direct services also. We're also going to provide medical services for the pregnancy or labor for women with disabilities and regular medical examinations and other health management systems too.

And there is another thing mentioned in the legislation, that there has to be a need for a facility or a program for rehabilitation support and exercise so there is a sports facility in NRC which we can set a model. Because if you're running a customized exercise program, strengthening, and even endurance focus programs, game oriented programs, and these programs are very successful at this moment. So, we are going to spread this in the whole nation, and we'll have to see what comes in the future. But this is our idea in health promotion and management.

I have four minutes, but this is all. Thank you for your attention and I hope to be here soon in the future. Thank you.

## *Home-based Rehabilitation in Yokohama City : the past 30 years and next decade*



***Toru Takaoka***

Deputy Director, Yokohama Rehabilitation Center

### **[Biography]**

- 1987 Graduated from Yokohama City University (YCU) School of Medicine
- 1989 YCU Hospital Faculty of Medicine, Department of Rehabilitation
- 1991 Kanagawa Rehabilitation Center, Department of Rehabilitation
- 2003 Yokohama Stroke and Brain Center, Department of Rehabilitation
- 2004 Director, Yokohama City Rehabilitation Counseling Office for the Disabled
- 2014 Current position

### **[Summary]**

#### **[Introduction]**

Since the founding of this center in 1987, Yokohama City has been providing original, home-based-rehabilitation services for disabled clients whose range of activities is mainly restricted to their home. Here, along with an introduction of our present services, we review past fluctuation in our services, and consider future challenges.

#### **[Outline of Services]**

When a client/family desires home rehabilitation, a request is submitted to this center from either the public health or welfare center that is servicing their everyday needs or from their attending nursing station, care manager, or medical facility. We then arrange scheduling, make necessary job assignments, and visit the client together with the facility that originally lodged the request. After evaluating the client, we provide service for a limited period. Specifically, these services include activities of daily life training, functional maintenance training and instruction, living environment improvement (e.g. technical aids introduction or house remodeling), or provision of social participation support.

#### **[Fluctuation in Client Numbers]**

The number of clients using home-based-rehabilitation services was steadily increasing, reaching approximately 1400 annual new consultations in 1999. However, following the introduction of the nursing-care insurance system in 2000, these numbers gradually declined to 950 cases annually. Subsequently, ever since the ratification of the Services and Supports for persons with Disabilities Act in 2006, client numbers increased again, and at present are sustained at 1200-1300 cases annually. Incidentally, the proportion of clients with causative diseases such as brain diseases or bone and joint diseases is decreasing, while that with neuromuscular diseases is increasing.

#### **[Future Challenges]**

National health and welfare system-dependent changes in client numbers and target diseases are unavoidable, and thus it is necessary to consider what action to take in response to these changes. Furthermore, for comparatively young clients, it is important to focus on support that leads to social participation, including employment. Lastly, I believe that demand will increase for appropriate rehabilitation that addresses the progression of neuromuscular disease symptoms.

## ***Home-based Rehabilitation in Yokohama City : the past 30 years and next decade***

**Toru Takaoka**  
**Deputy Director, Yokohama Rehabilitation Center**

Thank you very much my name is Takaoka from Yokohama Rehabilitation Center. Now I would like to make my presentation in Japanese if I may. Now we have been listening to a great presentation on the status of the rehabilitation around the world, and I would like to use this opportunity to thank the NRCD, Dr. Yoshiko Tobimatsu for organizing this session.

I came from Yokohama which is the largest municipality here in Japan and I would like to talk a little bit about what we do in our rehabilitation center. Now Yokohama City is located in close vicinity from this region. It's about a 30-minute train ride. The total population is about 3.73 million. It's the largest municipality here in Japan. The percentage of 65-year-olds in the population is 22.8. Total percentage to the total population of Japan is 26.7, so I would be able to say Yokohama is in a way a younger city.

There are 100,000 people with disabilities living in Yokohama City. First, I would like to talk about the situations of rehabilitation here in Japan, especially citing an example of stroke. Once there is an outbreak of stroke, the early-stage rehabilitation is provided in a hospital based on the national insurance system. Duration of hospitalization varies depending on individuals. Sometimes two months to three months, and in some cases, six months or so.

After the outbreak beyond six months, it's called the chronic stage, and there will be a visitation to the hospitals or sometimes hospitalized in receiving the rehabilitation. There is also a vocational rehabilitation as well as the home-based rehabilitation depending on the welfare system. In Yokohama Rehabilitation Center, we are especially focusing on this chronic stage, which is the rehabilitation provided under the welfare system of the medical insurance system of Japan.

Acute phase, recovery phase actually would be able to take the rehabilitation in the services we provide so that they would be able to go back to their workforce and participate in the society. The importance is to be able to provide the rehabilitation in a consistent manner from a quite early phase.

Yokohama is the place where there are a lot of modern buildings. But on the other hand, there are historical sites as well. In Yokohama, let me introduce to you the home-based rehabilitation that we do. At the same time, we'd like to look at the changes in the last 30 years and look at where we are and the future.

In 1987 our center was established in Yokohama City. These are the people with disabilities whose life is mostly indoors where the life is limited. Our center is having its 30<sup>th</sup> anniversary this year. This service is a unique service provided by Yokohama City and this is followed under the welfare service in which no direct financial burden is required for the users.

For this particular project, there are various people who are allocated such as social workers, engineers, health nurses, PTs and OTs. Other than that, the doctor specializing in rehabilitation like myself is sometimes working as an architect as well. I would like to show the flow of how this home-based rehabilitation service works.

First, if there was a request of home-based rehabilitation from the user, him or herself, or their family members, then we would talk to the welfare health center or from the nurses as well as from the other medical institutions so that they would request us of the needed services. We would adjust our schedule and then would select what kind of service required and will visit that particular patient together with the original institution who had referred to us.

At the time of our visit we would listen to the requests from the service user, the family, and from their supporters, and then would conduct the assessment of their physical functionalities as well as psychological functionalities and the environment they live in. And then would set the target and duration of the program for implementation. First, we would develop the plan for assessment and rehabilitation, and second is to provide support in terms of functional training ADL, and caregiver training. Three is to request or suggest on assistive tool use or modification to their homes for environmental approach. Four is to support for social participation. This is the site that is often times used for some of the architectural measures for these people to live safely at home. This is more like a step lift, and this is also a stair lift. Also, this is an example of the lift introduced in bathrooms. With this the physical burden among family members has been reduced dramatically.

In terms of home-based rehabilitation, the services are provided from the medical institutions and the welfare insurance centers, and the visiting nurses provide services. We are the professionals from rehabilitation so we provide necessary approaches towards rehabilitation as a backend support to the community institutions.

Next, I would like to look at the changes in the last 30 years. One of the major changes has to do with the number of people who have used the home-based rehabilitation services. Since the inception of our center, the number of visitations were on the rise. However, since the introduction of the nursing care insurance system, the number have declined. After that, from the inception of the services and support for the Persons with Disability Act the user number has started to rise again.



Another change that we see is the kind of illnesses that these users are faced with. The left is a situation of 1999. Stroke, brain injury, encephalitis, and the brain tumor, such brain diseases have constituted more than 43%, followed by rheumatoid arthritis, and an osteoarthritis constituted 17%. Those are bone and joint diseases. The remainder 10% were spinal injuries or the spinal cord disorders and neuromuscular diseases. However, if you look at the statistics taken back in 2015 the brain diseases have decreased, but there is an increase by threefold in the neuromuscular diseases to 34%. And 18% is the childhood disease such as cerebral palsy.

This is the age distribution of users. The survey year is different from the earlier graph, but the average age as you can see is 60-year-old, median age 65-year-old; therefore, it is lenient toward older age groups. However, there is a wider age group and we see quite a number of young users as well.

This is the kind of the support that we provide. Moving in-house or daily activity, the transfer supports, and also toileting and bathing which is quite related to ADL. On the other hand, in terms of support going outdoors or communication device use, these are the kind of tendency that we see more recently. In the title of this presentation I've mentioned about the upcoming 10 years. However, this decade, 10 years, doesn't have that much of a significant meaning because we are representing one municipality. Therefore, we are often times affected by the national policymaking. So, in a way it is quite difficult for us to see what may happen in the future.

So even if I say a decade it is still of a longer span view for us. I still have 10 more years or so until my retirement age, so I have just at the age of 10 years that I would like to show the respect and the responsibility for the remainder of my work life. Now, as I have indicated, the user number had gone up and down in the last three decades, so I would like to look at the reason why.

The initial increases were observed at the time when our rehabilitation services have had the rising terms of recognition. On top of that, Yokohama City had reinforced the support subsidy for this kind of services, so that the subsidy would be utilized to modify people's homes as well as usage of these services. However, after that, there is an acute decline in the number of users, and this is related to the introduction of the nursing care insurance, meaning that there are more social resources increased due to the access to the nursing insurance services. Many kinds of services were provided so that the users of our center have decreased in number, and there are care managers from the private sector that is also providing the care plan as well.

However, the function of public welfare offices had reduced at the same time. For example, setting up the handrails as well as removal of stairs. These do not require sophisticated knowledge. And also, lease out the welfare assisted tools has become

quite prevalent so these reasons have contributed in reduction of the usage of the nursing care services at our center.

It is true that there were some negative implications for our business; however, for the people with disabilities or elder people I think that these services from the government is actually positively impacted. If the private sector is able to provide a wide range of services, then there could be a situation that the public level services may stop, and I think that may be the correct direction. We, from our standpoint, may lose our jobs. Therefore, we are looking at various different areas for us to be able to be more instrumental. And one of such area would be to provide more specialized services and at the same time provide some services that the private sectors are reluctant in encroaching.

The first, when it comes to the quality service provided by the private sector. The care manager of the nursing insurance would sometimes come to us for request of developing the plan. We have opened up our doors to accept these care managers so that we can work together and collaborate together in order to provide services to the users. Secondly, when it comes to a more specialized service, they are ALS, which are progressive diseases, and also there are a neuromuscular disease represented by dystrophia. And also, higher brain dysfunction, and also some of the illnesses among the young and small children sometimes become quite difficult to provide the services, so we are promoting that we could be of the place to provide services to those people. And there are some services that the private sectors are difficult to do, such as providing training outdoors, or sports for people with disabilities and support for the vocational training.

As a result from that, we see increasing numbers of home-based rehabilitation cares. So, this is the kind of direction that we would like to aim towards and would like to continue providing this support. When it comes to the vocational support the private sector is now very active and encroaching into this market. So, we see there is a very fast change occurring in the market. I think that the importance is to grasp whatever are in need of depending on the time of that particular age.

Now, lastly, I would like to talk about the roles expected from the chronic stage rehabilitation. Especially during the rehabilitation and the recovery phase, the focus was the self-reliance in ADL as well as to go back to their homes. In the nursing insurance services, this would be the area of the services required for the patient to be able to live in a stable manner. However, when it comes to the long-term services required for the patient to become self-reliant, and if there is an expectation of being able to improve their status, not only the recovery phase rehabilitation; however, there are some areas needed which cannot be covered by the nursing care insurance. Even in the chronic phase, there are certain timing in which the rehabilitation may become in need of so there has to be a system to be able to have such access from the user.

Well the Yokohama City has a great night view, so if you have your free time, I would welcome you to visit Yokohama City. This concludes my presentation. Thank you very much.

## ***The Status of Persons with Disabilities and Rehabilitation Today in Japan***



***Yoshiko Tobimatsu***

President, National Rehabilitation Center for Persons with Disabilities

### **[Biography]**

- 1978 Graduated, Tokyo University School of Medicine
- 1985 National Rehabilitation Center for Persons with Disabilities
- 1998 Graduate School, Tohoku University
- 2004 Graduate School, Hiroshima University
- 2008 National Rehabilitation Center for Persons with Disabilities
- 2016 Current position

### **[Summary]**

Japan is a super-aged society with elderly persons, who are 65-year-old and older, constituting more than 27% of population. The proportion of elderly persons with disabilities has also been increasing with approximately 70% of those with physical disabilities being 65-years or older. Meanwhile, a declining birthrate has resulted in a reduction of the working population. On the healthcare side, care system for elderly persons has been introduced based on policies of extension of healthy life expectancy and integrated community care system. In case of elderly persons with disabilities, there has been a need for improvement of health, extension of healthy life expectancy, and enhancement of vocational rehabilitation. Furthermore, acute stage medical care has also been advancing owing to the prevalence of advanced emergency and critical care centers, allowing individuals to survive from multiple severe burns, etc. Cancers were thought as fatal diseases in the past but are thought as chronic diseases today. Consequently, there is a need to develop techniques for rehabilitation of such patients. Thus, in this lecture, I will speak about the current status of persons with disabilities and their rehabilitation in Japan, and the role we have to fulfill in providing them with rehabilitative care and social welfare services.

## ***The Status of Persons with Disabilities and Rehabilitation Today in Japan***

**Yoshiko Tobimatsu  
President,  
National Rehabilitation Center for Persons with Disabilities**

The slide shows the demographic change in Japan. The vertical axis indicates the number of people living in Japan and the horizontal axis the year. In 2015, we saw a turning point. Since then, the total population of Japan has been on the decline. At the same time, our working population, the red portion, is also decreasing. The percentage of the elderly people is represented by a red dotted line. This has been on the track of the rise, and in 2060 the elderly people will be accounting for nearly 40%, that means. At that time, two fifths of the population is the elderly people, and 25 % of the population is over 75 years old. This also shows the increase of the number of people who require the care. The vertical axis shows the number of people and horizontal axis means the year. The long-term care insurance policy has been in place, and the elderly people who are recognized as requiring official elder care and assistance, they are eligible to receive such services. They are categorized into seven degrees. About three million people were recognized as requiring the care eleven years ago, but today the number has doubled to about 5.5 million. With that background, the government of Japan has been promoting a comprehensive community based care. This is intended for elderly people in local communities. On the right-hand side, as you can see here, elderly people receive the medical care, the health promotion, and the long-term care services. These services are financed by health insurance, long term care insurance, as well as social welfare budgets. On the left-hand side, when elderly people get illnesses, then they are hospitalized for acute care, and if they are regarded as requiring rehabilitations, then they move to the convalescence period facilities before coming back to the communities.

About 8 million people in Japan are estimated to have disabilities, and 4 million of them are emotional disabilities, and 750 intellectual disabilities, and 3.2 million mental disorders. At least about six percent of the total population in Japan is believed to have some form of disabilities, and of them, handicapped people, about emotional disabilities are half of them, and a quarter of them have internal disorders, meaning disabilities of internal body organs, for example, the rectum or the kidney or the lungs and heart and so on. And this again shows the number of the physically handicapped people for these years. Yellow portion in the middle shows the percentage of emotional disabilities, and a number of the internal disorders and emotional disabilities, the people which are increasing these days. This shows the age distribution of people with physical disabilities in 2011. Vertically, actual number, horizontally, the age groups. About 70% of them are 65 years or older, what we call elderly people. The aging is quite clear amongst the people with physical disabilities. Now, rehabilitation for these people, if some of the young people have

disabilities or the people have the rare diseases, then they require a vocational support. So instead of comprehensive care, they are able to receive some special form of assistance, the community wise, or at the national rehabilitation hospitals or the centers, they receive inpatient care at these facilities, and that the medical and vocational rehabilitation services, are provided to these people. Depending on the degree of disabilities, they may come back to their communities to acquire jobs, or some of them stay in nursing homes. And so, you saw already in Japan, the number of the total working age group population is decreasing, so that's why the employment for the elderly with disabilities are very important. Vertically, the number of people who have employment, and horizontally, the year. As you can see here, the increasing number of people with disabilities are employed. This shows the detailed profiles of these people. 20% of those physically handicapped people have jobs or employment broken down into these categories: 70% of them, as I said, are 65 years and older. So, that means that about 30% of those physically handicapped people who are in working age have some form of employment.

And now, developmental disabilities. This table shows children without intellectual disabilities, but children who are found to have some problems in learning and behavior to a significant degree. This evaluation has been given by their teachers. At school, 6.5% of the enrolled children have been found to have such difficulties according to these figures. Now with the maturing of the society, more attention has been given to mild disabilities, or newly recognized disabilities, these days in this country.

For example, a lower vision and higher brain function disabilities are some of these examples, and autism spectrum disorder is another example. Early detection and early intervention is required. Autism Spectrum Disorder Center has been established in various districts. Welfare, medical, educational, and vocational services are provided through a coordination of governmental ministries and sections responsible for these areas, and networking is much needed. At our national center, the information and support center for persons with developmental disorders, and the information is collected for analysis and our communication and the awareness raising activities and the research survey activities are carried out. Let me now discuss the improvement of medical care services. This brings the need for a new type of rehabilitations.

The Advance Emergency and Medical Care Centers are now being established at various locations in Japan. There is a very high level of emergency needs met, and severe injury, broad burns, and multiple amputations and acute intoxications are taken care of. With the increase of the survival rates through these services, higher level of rehabilitation services are required for all the survivors. Also, malignant tumors in many cases are fatal diseases, but these days the higher survival rates are being reported, and malignant tumors can be regarded as chronic diseases these days. This shows the five-year survival rates for these cancers: stomach cancer 77.2%, colon cancer 78.8 % lung cancer as high as 82.4 % is the five-year survival rate these days, much higher than it used to be. The patients, survivors, now can have

higher prospect of coming back to their local communities for life and employment. So, the cancer rehabilitation services are now increasingly required. Thank you very much for your attention.





## ***Discussion and Q&A***



**Facilitator Koide:** Good afternoon ladies and gentlemen. Now we'd like to start the discussion. So, I know that you might be getting tired; however, we have wonderful presenters from overseas, so we hope you will join us until the end. During this session, first, I would like to ask each presenter to give their comments on the questions which I raise, and then after that we would like to move on to the Q&A session and ask the questions from the floors. Since this is a great opportunity for all of us, I hope that many of you will come up with many questions and to have active and fruitful discussion.

And so, if you have a question to a certain presenter, so does to everyone, please be ready. So, starting from Mr. Darryl Barrett. I would like to ask for your comment about - listening to the presentation from the six presenters, I would like to focus on the three points. One is about the aging society, so how you work against this aging society? The second is about the assistive device, how we can disseminate this assistive device? And three is, by listening to the other presenters, what makes you most interested in and if you have any question to certain presenters, please ask that question.

And, so these are the three points that I would like to ask you to include, but I know that there's a difference in each region, so you don't have to cover all these three points. So, if you can, kind of mention, either of these three points that will be good. And, there in the presentation, thank you very much for following time during your presentation and we know that we really had a very good timekeeper. But, I'm not a good timekeeper myself, so I will give you like three to five minutes per comment, per person. So, I would like to ask starting from Mr. Darryl Barrett.

**Barrett:** Thank you very much. Three minutes, I'll do my best. How do we address aging? It's a great question. There's no one way that we address aging, but I think for me, we have to look at rehabilitation, as prevention because often rehab sits in the continuum of care when you've got health promotion, prevention, curative treatment, rehabilitation, and palliative care. But if we look at what rehabilitation is about, it's about maintaining or improving function, and when we improve function, we improve health outcomes. So, rehabilitation is also a form of prevention, and for aging populations who undergo degenerative processes as just part of the normal processes of growing older, rehabilitation has a strong preventive value.

Then three or four, really are the key areas to look at addressing aging. One is in governance, because rehabilitation services are often in community or social affairs ministries and in ministries of health. So, we need to make sure that whatever governance structures or governance mechanisms we have that provide rehabilitation, that there's coordination, there's clarity of roles between ministries, and there's collaboration for activities between ministries. So, governance is one area.

Workforce capacity is the second area where we need to address the gaps. We have an incredible need for rehabilitation professionals and services in our region as we've seen from all the presentations about the services. So, we need to look at work force capacity and that's not only rehabilitation professionals like physiotherapists, but that's also doctors, nurses, public health workers. What type of rehabilitation can you do in the work that you undertake?

Thirdly is financing. Rehabilitation is often covered through out of pocket expenses by the user. Some assistive technology is expensive and often the user has to pay. So, we need to look at both financing at an institutional level for the services and financing at an individual level, to make sure that any health insurance or benefits include rehab and specifically on assistive technology. We need to make sure and this goes into the second question about how we address assistive technology. We need to recognize that assistive technology is essential, just like many essential medicines are. Like I said the governments need to plan for assistive technology, just like they would, many essential medicines that they already do.

I can buy these glasses, for, you know, \$100 in Australia. Probably not as nice looking as these ones, but I can buy glasses quite cheaply in Australia. It should be the case, if I need a wheelchair. My eyes don't work so well, I need glasses. If my legs don't work or don't walk so well, I might need a mobility device. I should be able to access that as easily as I can access some glasses. So, we need to look at procurement, we need to look at financing procurement and in regions, we can look more broadly. For example, in the Pacific, maybe we look at bulk multi country procurement to bring the cost of assistive technology down.

And then we need to make sure we have professionals that are trained to give out this equipment. So, I think I've chewed up my three to five minutes. I could keep going, but I'm going to share the stage. So, I will hand over, thank you.

**Facilitator Koide:** Well, thank you very much Mr. Barrett for the very comprehensive comment, and I believe that each of the comments that you made, was very important ones. Okay, then next, Dr. Bondoc.

**Bundoc:** Thank you and good afternoon everybody. In addition to what Darryl has stated in reference to how we would we go about managing aging, we have to look at it from the context also of the home environment and the community environment such that we could be rendered more independent and functional within the house and in the community. In the Philippines, we normally have care givers than assistive technology. So, I think it is also very important that more than the aging person himself or herself, we should also look into how we could help a support for care givers who would take care of the aging population.

In terms of assistive technology, one thing, one factor that we could add in order to improve the access is actually early identification of those who would need assistive technology, so screening is very important. And in order for us to screen, there should be good awareness. One of the pitfalls why assistive technology is not accessed even if it is there, is because, very little people are aware of its use, of its presence. If you are not aware of its use, of its presence, it could not be accessed and therefore utilization is also low. So, these are the other two factors which can, if we improve on, will facilitate access to assistive technology. Thank you.

**Facilitator Koide:** Thank you very much Dr. Bondoc. Well, together with your presentation, yes, thank you for giving the comment on the assistive device from your point. Okay, so next, Peter please.

**Poon:** First I'd like to declare my interest, I'm getting old too. I'm sure all of us are, so in a few years' time, I'm going to retire. But I don't think I'm old. In fact, I think when we say aging, often we have this value attached to that. We're not good as before, we're not working, so we become dependent, but it is not the real case according to research and all the study. Getting old is still very useful. So, I think by keeping our health as well, we will be productive. So, I think we have been talking about when we should retire lately, whether it's 60 years old or 65. I think it's too young. If we look at the lifespan, in the past, people may live to their 70's, but now we are putting 90's, so we have that movement.

I think we need to redefine what is aging. In Hong Kong lately it has been having discussions, people from 55, because some of them maybe already retired, up to 75. We redefine that as golden age. In Chinese, I think in Japanese as well, gold is valuable. So, we looked at this age zone, 55 to 75, as productive, is invaluable. So, having that context, concept shift, we then look at what can we do to make this group of people stay healthy. So, we looked at prevention, optimizing the health and, and mental health as well as to provide support so that if they're undergoing some crisis for example, they have a stroke, they have diabetes, they have health problem, we provide them with sufficient support so that their condition wouldn't deteriorate.

On the other hand, they could become healthier, because if all of a sudden, at age 60, doctor tells you that you have hypertension and if you control your diet, do your exercise, likely you will be even healthier than when you're 55, when you're working. Like Japan, like Hong Kong we are working so hard so, by doing that, we can reverse the situations. Become more healthy, become more productive, and then we can become volunteers, we can be further engaged to employment, and even we look after the grand kids. So, I think the concept is very important, to look at aging.

And then if we look at the literature, it's really the last six months to one year that the elders really need more support and our challenge at the moment, even though

my mom, being a health care professor, when she had a stroke, I didn't know what to do. I don't know what's available in the community. So, in case we can develop a new staff force, health coach or resource person that the family can go to. He knows what's happening around what's available and to give that extra bit of guidance. I think that would be very important as a bridge the community as well as medical system.

Then I have a few statements to address the issues of the assistive device. Often assistive devices are there, but people don't want them. Either you say, well, hearing aid or a walking stick, because there's a very strong stigma attached to that, walking with a walking stick means you're not able. So, I think that value needs to be changed as well, that's number one.

And then the other thing is, we really good assessment for assistive device. Get the right one. Not letting anybody straight go to a shop and buy those fancy stuff, it's not going to work. We need good matching, good assessment, and then we need follow up as well. We often see people who are amputee, they have their legs and then all of a sudden, the conditions changed and it didn't fit anymore. So, I think follow up and monitoring ongoing support will be very important. Thank you.

**Facilitator Koide:** Thank you very much Peter and I would like to also thank you for the comprehensive comments as well, especially at the outset to have mentioned about the definition of the elder age. Because recently here in Japan, the age has been recommended to elevate from 65-year-old as the retirement age to 75 instead. So, I think that there are a lot of changes occurring in various countries. And in Hong Kong, you mentioned that the gold age is 55 between 75 and I think that gold and old is rhyming, which is quite unique. I think that this is something very important and I would like to mention that in various occasions. Now, next speaker please, Dr. Limin Liao.

**Liao:** Concerning the aging management, I have three comments. I agree with the before the speakers. The first is most, is government support because government should emphasize the aging problem. Aging could bring, or result in a lot of disease, for example, Parkinson's, diabetes, and so on. So, if the government gives good policies and financial support and then professionals could start the, some detail management to manage the aging process.

The second, I would say, we should promote the awareness of pro aging management. Awareness include two aspects, one is professional education. At the moment in China, there are not have doctor, only know how to treat, but do not know how to do rehabilitation. For example, for a diabetes patient, they only know how to treat the diabetes, but after treat, they do not know how to do rehabilitation

for this kind of chronic disease. However, the doctor knows, if this patient has spinal cord injuries, of course, they know, oh, rehabilitation is very important.

But for some, another chronic disease, for example, there's the diabetes and Parkinson, and another chronic disease, there's some doctors in China who do not know how to do rehabilitation. So, this it requires our professional society, every kind of professional society, gives education or training to the doctor, to their every kind of professionals. Doctors and the nurses are first.

The second is to improve or promote awareness for the public. We should let the public know how to, just like Peter said, how to save management and then they can get very good results. We should use television, newspaper, and training course, and perhaps develop courses, organize some public courses and improve the awareness for the aging management.

The third I would point out is, we need the good technique. I will give you an example. I'm a urologist. As you know, the urine component is very common in elderly persons. In China, three years ago, few patients have visited me, urologist because according to traditional Chinese culture, when the people become older, then urine incontinence that is nature process. No solution to treat. But in recent years, we use every kind of advanced stage technique to treat the urinary incontinence well.

So, we can use muscle training, we can use "drug", we can use the neuromodulation, we also can use some surgery until we can dramatically solve the urinary incontinence program. So, the patient and the public believe urinary incontinence can be treated. So, there's confidence over the rehabilitation for the urinary incontinence. So, this is my comment, thank you.

**Facilitator Koide:** Well, thank you very much for that comment Dr. Limin Liao especially when it comes to the rehabilitation of say, diabetic patients and also urological incontinence. It is true that there are certain problems like that occurred here in Japan as well, and there are also the education training required for the public as well as to the doctors, which I think is quite of an essential, training for here in Japan as well, and thank you very much for pointing that out. Next speaker please Dr. Lee.

**Lee:** Yes, for the first question, how to combat aging. This is not an easy task, so, just going to focus on the, in terms of physician, in the perspective of a physician, I would say, help them in maintaining their physical activity. Keep their physical activity at the most, as they can, and maybe exercises programs or sports facilities. This also might need some government's awareness, such programs I think.

But physical activity to combat aging schizophrenia, also cognitive impairment, actually is proven that by doing exercises, actually it can decrease cognitive

impairment. So, this is very important to continue to have certain amount of physical activity, and then in there, on senior age and that will lead to better function of course, better muscle mass, better cognition and that's what I think, what it takes to contain, maintain this physical function, is very important.

And for the second question, how to facilitate us to AT. This is a very tricky question because this also needs different component to be addressed. Actually the National Rehabilitation Center in Korea is also trying to figure out how to work this out. Because as Asian culture, Koreans also have negative perspective, negative stigma towards 80. You don't want to wear a hearing aid or if you can't, if you don't need to. They will just refuse to use assistive devices they can. So, I think, better information, and better education, and some of them they don't have that information, where to go and what kinds of AT, will be needed for themselves.

So, information and education is needed, but also the funds and policies and the government has to be supportive on this too, to get the very cost accessible, ATs because they are, of course, very expensive. All the pieces are, mostly very expensive. So, to tell you an example, what we are trying is that, we expanded the CBR in region and nationwide. So, we're trying to combine the AT provision center, 11 AT provision center and CBR into one and we're going to make this happen by the end of the year or maybe next year. So, we can do the education and the information provision, in the same time and then, give some guidance to use the AT Center in each region so that I think, that will make some better access to AT, at this point. Yes, and that's my answer and thank you.

**Facilitator Koide:** Dr. Lee, thank you very much indeed for your very valuable input. For example, exercise is important to maintain the physical functionality, and likewise in Japan, the health promotion and illness prevention has been promoted, has been strengthened. Of course, we also need the awareness raising, and the public education program is important. And also, assistive technology is government's role, is also important as well in Japan together with the Ministry of Health, Labour and Welfare. We, at the National Rehabilitation Center for Persons with Disabilities, we collect information and exchange information, so that people are more informed, as to the availability and accessibility of assistive technology. Yes, thank you very much indeed, Dr. Lee for your comment. And now, Dr. Takaoka please.

**Takaoka:** Thank you. As other speakers said, the healthy aging, has become increasingly important in Japan. I think, this goes not only for able bodied people, but also, the people with disabilities because people with disabilities are also aging very rapidly, so they should be able to maintain their physical health conditions so that they can keep exerting potential as well. That requires the prevention of any



secondary illnesses and retraining is provided to improve and maintain their body functions as well as to establish any enabling conditions or environments.

This assistive technology, I also acknowledge that there are many people who are rather hesitant to use assistive technology, assistive device. I now use, the interpreting device, which reveals in front of people that I'm not good at listening to English, but anyway, assistive technology is very important and useful for us, we shouldn't be hesitant. And at our center, development and promotion of assistive technology and devices, these have been very important part of our obligations and missions. Through community based rehabilitations, we'd like to pass our findings and research achievements on to local communities, so this will continue to be a very important part of our missions.

**Facilitator Koide:** Thank you very much Dr. Takaoka for giving us what's going on in Japan. Yes, I will not practice what you already preach. I don't mean to preach what you already fully know, that is all what's going on in Japan. Now, Dr. Tobimatsu.

**Tobimatsu:** Yes, in June last year, the cabinet office in Japan, they established a plan so that the old people of Japan should be given opportunities to re-exert their potentials. All one hundred million people should be active in Japan plan, so this is my temporary translation of the government plan. And the background of this plan was explained in my presentation and specifically speaking, to the total population. There is one hundred million that should be maintained and birthrate should be improved, should be raised, and healthy aging should be promoted, so that the number of the working population should be maintained and increased.

For example, as to the working population, not only young people, but also the elderly people are encouraged to remain in the work force as also the people with some difficulties and disabilities are also encouraged to be part of their working force.

And what about the people with disabilities? In this government plan, as Dr. Takaoka said the health promotion is encouraged and also the longer healthy life expectancy is also encouraged of for with disabilities. At our center in 2011, Health Promotion Center was established. So, we are more proactive and we are more forward looking than the Government Action. But of course, there are more to be done. We are still on the stage of awareness raising and we are simply on the communication stage, so to speak. Also, in Japan the employment rates of the people with disabilities has been consistently on the rise.

And about assistive technology? Yes, the longer healthy aging of course, this is impossible without utilizing assistive technology. People with disabilities, of course should enjoy a workout, but they need assistive technology because they have some

functional difficulties. So, they need some of the general systems and also the assistive technology in the devices. Assistive technology in devices are important for employment promotion because—and people with the vision problems for example, should be able to work quite efficiently with some assistive technology. Assistive technology, therefore, should receive ongoing support for research and development, and also provision of assistive technology in device. In Japan, there is a certain system, a long- term care insurance, and independence support law has some of the mechanism where people with disabilities are eligible to use some assistive technology. They are able to rent, but some are quite expensive. So, that means some burden on the tax payers. So, the necessary device should be provided to people who really need them. So, that requires some scientific evidence or the scientist role. Also, if something good is developed, but then if that is not used, then that would be totally meaningless. So, the requirements on the knees and the product of development have to be matched and some of the effective function can be provided through quite a lot ex solutions, not necessarily height ex solutions as well.

**Facilitator Koide:** Thank you very much, Dr. Tobimatsu. So, thank you indeed for your explanation of what's going on in Japan, as well as the National Research Center for people with disabilities.

Now we would like to move on to the Q and A session. Question from the floor. And—so, your question can be anything. It can be comprehensive or more individual like asking question “How about this in your country?”, or it can be anything. So, please feel free to ask the question. So, if you have a question, please raise your hand. Okay, please. Oh, yes, please introduce yourself—your name and your organization.

**Nakanishi:** I'm from Asia Disability Institute. I'm Yukiko Nakanishi and I've been advocating the rights of persons with disabilities and I am very interested in Asia. Therefore, I was anxious about today's seminar. It might be out of my interest. However, I was happy to hear the speeches starting from Mr. Barrett were given from the viewpoint of social model.

I have questions to three speakers.

First, Mr. Barrett, I would like to ask you about social model. You are working in WHO Western Pacific area. How much do you think the concept of social model is promoted in the area? In such developed countries like Japan, professionals and experts already understand social model due to advanced education and the policies are shifting to social model. However, I think the Western Pacific Region has many developing countries, so I would like to know the situation of the developing countries.

My second question goes to Peter from Hong Kong, who talked about self-management. Looking at the photos in your presentation, I got the impression that only the experts were there. Do persons with disabilities themselves participate in the self-management program as role-model?

My next question goes to Dr. Lee from Korea. When I was listening to your presentation, you said that 97% of the persons with disabilities were in the community. However, compared with Japan, the number is quite high, if I add persons with intellectual and psychiatric disabilities to persons with physical disabilities including those with visual and hearing disabilities. How about the people with intellectual disabilities and the others? Are they also included?

**Facilitator Koide:** Okay, so, thank you very much. So, starting from Darryl, can you answer to the question?

**Barrett:** Thank you Yuki! Great questions. I'll try and be clear. So, in terms of the social model it's something Peter said in his presentation about the medical model not being bad. I don't think there are bad models. I think it's how we apply them that mean if they are good or bad in a sense because if we look at the convention on the rights of persons with disabilities, it's very clear that it takes us now to the place of a social model. And it's very clear that we all of us have to understand that in order to get the best from the services that we deliver. We shouldn't be threatened by the social model. We shouldn't be threatened that we are looking at participation and environmental barriers rather than focusing on the health condition or an impairment. So, I think the social model, like other models is a particular perspective, but at the end of the day, a health condition cannot be ignored when we're looking at participation and we're looking at the social model. I think for rehabilitation professionals, it's sometimes easier for us to focus on the individual and the health condition that the individual has because many of us work in institutions that are very focused on treating people. But as rehabilitation professionals we also have to treat the environment, and we have to treat the barriers that people experience in their environment.

In terms of how the social model is applied in the region, you're right, it's variable. In some countries, the social model might be understood in theory, but it's not put into practice, and in many places disability is still seen as a health condition first and foremost. And there's still a long way for us to go before all health institutions and governments actually understand that disability is a complex concept, it's an involving concept and it's a concept that is much more than simply a health condition. So, I think in some countries, perhaps they are a little bit further on the journey and in other countries we're really just starting the conversation. But it's something that we'll continue as we go.

**Facilitator Koide:** Thank you very much. Next, Peter, please.

**Poon:** To follow-up with the questions on the user's participations, I wouldn't say patients because I think they are just paraphrase of users, and I think the whole story of self-management had to have started in about 20 years ago in Stanford University, and the way they build up the module is very much peel in. When I say that they really trust that people that has the experience of chronic disease or disability they are the best one to teach the others how to self-manage. So, with that in mind, I think they developed their training menus, their training package, and people with disability or chronic disease can join their training, and be trained as a leader. And often, when they get to retraining, they will be accompanied by the health care professionals—could be a nurse, a therapist—so that they go together, learn together and they become partner to further deliver to the service. Back home, in the past 20 years we have done that. I used to train peer leaders, so they could be persons with heart disease, diabetes, and they are eager to learn, so they join my program. And then I find out the potential and further train them up to become a leader, so that they can take care of the programs together or even on their own to deliver the services. So, I think, in that sense is a very good type of participations from the uses of the piece. Not only that. We find that in Hong Kong having a great management program is good, but often is the follow-up that is more important as well. So, often, after diverse structure interventions then, the clients, they use these leaders will then follow up. They caught him every now and then and the form walking groups, exercise groups, swimming groups, so that they can continue the exercise together. And last, but not the least, sometimes they even go to the hospital. Say when the patient's got to meet it, apart from the family members these leaders will go to the clinic or hospital to visit them to continue the support. So, I would say this is a mixture between the self-management and self-help model. So, we are working on that. So, I hope that will answer your question.

**Facilitator Koide:** Thank you. Then Dr. Lee.

**Lee:** I think this might be underrated that this survey was only carried out for the registered disabled persons. So, yes, intellectual disabilities and mental disabilities are mostly in the facilities, but I guess some intellectual disabilities are maybe missed out I think, probably. Because not all of them are involved in our registry system. It's about intellectual disability there's lower awareness towards it, and I come to see a lot of unregistered intellectual impairments. So, I think this is very underrated. Yes, that's what I think. Thank you.

**Facilitator Koide:** Thank you. Okay? Okay, then any other question? Please.

**Mihara:** Well, my name is Kanako Mihara I don't belong to any organization.

I have paralysis of the left side of my body caused by Cerebral palsy. Also, I have visual impairment in the right side eye and severe eye-field defect in the left side eye. I sometimes bump into passengers in the street and receive inconsiderable caution from them. So, I put a "help mark" on my bag when I go out to show people that I have invisible impairment.

Do you have any kind of symbolic mark like a "help mark"?

**Facilitator Koide:** If you have any answers to this, then, please.

**Barrett:** The point here is about our perception of disability. Often when we think of someone with disability, we might think of someone who uses a wheel chair, perhaps somebody who's blind. And I go back to the social model that Yuki raised in terms of what are we really looking at? We're looking at participation. We have to move beyond thinking that disability is a health condition because it's only part of the picture. I have seen research that shows that the majority of disabilities occurs in people who have an invisible—a so called invisible disability. And this is people who may experience mental illness or intellectual disability who visibly when you look at them, they don't look like they have an obvious impairment. And it's that cohort, that group that are set to be the largest grouping. In terms of statistics, you know it's very difficult to look at the validity of the statistics when we measure disability because there are lots of different ways we can measure disability and lots of different terminology that's used. Whatever way we frame disability can influence the statistics we get at the end. So, in terms of addressing disability for people who have an invisible one, so to speak, then I would be encouraging us again to think about disability as the lack of participation or the limitation to participation rather than a health condition, because if we just think about a health condition we'll first and foremost be looking for something that's different in a person, rather than seeking the person to tell us where they are and not being able to participate because of the barriers that exist.

**Facilitator Koide:** Well, so, as she had expressed, she has some internal disorder, but she says she has a disability. So, is there any particular system in your country who have some means to claim that he or she has an internal disorder? If not, then we would like to ask another question from the floor.

**Poon:** While nobody asks questions perhaps I try to share my observations about the questions that's being asked about invisible disability. Back home, in Hong Kong we don't have such system, so we pay lots of effort in bring out the awareness in Hong Kong about people with different types of disability. One thing we do every year—

actually I share with Penny at this morning, so one campaign we have every year is in the central part of Hong Kong. Usually in November we will organize an event called Barrier Breaker. From this name you know the barriers they have, so we are going to break its barrier. So, we are organizing this whole day event in the morning. We would invite different teams. They could be teams from the corporate, from IBM, from the banks, so they form teams. Five persons in team and then we have teams from the school, mainly the secondary school. So, they join this team. Five persons in the group. In this group we are going to assign them with different disabilities. One will be wheelchair. The other one will have the eyes flow up. So, so they will have impairment in their vision. And the other with hearing impairment. So, we let these 5 persons in a group to do something. Say from point A to point B they take the public transport, and they go there to buy something or to go to a cinema, or to go to somewhere to eat, so that they can experience what is disability on the first-hand experience. And then we have debriefing sections for them and it's very powerful. They learned. And they became "advocates" as well in the family, in the corporate, in the society to really appreciate the difficulties that people with disabilities are encountering every day. I remember once I was with a medical consultant and I asked him the question "From this to that place how long do you think will take?" He would say "Well, usually half an hour would be sufficient. He was in my team in the wheelchair, and he almost takes two hours to go to that place. And then I talked to him after that, and he became more concerned because when he'd see the patients every day in his screener he often blamed the patient "You are late. You should come here on time." But having that experience, he really reflected on that and know how difficult for a patient, for a person with disability to go to see a doctor, not to do other things, to be there on time, given that we are living a very busy city. So, I think that would help people's awareness raising and so we are not having any system, but I think we are working together with people with disability to really work on this and to raise the awareness. So, this is what we have been doing in Hong Kong.

**Facilitator Koide:** Well, Peter, thank you very much for such an interesting initiative that Hong Kong is doing. Now are there any other questions from the floor? Please.

**Nakanishi:** Well, my name is Yukiko Nakanishi again. I have another question. When it comes to the regional rehabilitation or care in the local community, I think some of the presenter have mentioned about that say in Philippines as well as from Hong Kong. Now, in my case it was polio and so breathing is quite difficult for me. I got pneumonia and then afterwards I had to have a respirator in order to breathe. So, I was hospitalized and in that hospital, there was the home based care unit. So,

this group actually became responsible to visit my home after discharge from the hospital. A visit doctor, a visit bathing agent, health care nurses and personal assistants got together to discussed how to provide care. Although I was weak when I came back to the community, now I can live with respirator to use only at night.. I would ask 6 presenters thatr your hospital, rehabilitation center or government policy has such a scheme or similar programs or not.

**Facilitator Koide:** Okay, so who would like to start first amongst the panelists? Okay, please.

**Bundoc:** Thank you for the question, Yuki. In the Philippines, we don't have a national rehabilitation center, so for example, in your case where you have polio and you have problems in terms of breathing, the first step that is being done is to bring you to our tertiary care hospital, whichever is the most accessible to you. And the tertiary care hospital, there is rehabilitative care also together with the primary doctor who would take care of your respiratory problem. Together with the medications that are given therapy, exercises, and the conditions in which you can compensate for the times that you would have difficulty in breathing are taught not only to you but also to your care giver. Once you have been evaluated that you are now ready to go home and he discharged with no other medical conditions that could humper it, then the family is prepared and given education in terms of the lifestyle, the precautions that you need to take, the exercises that you need to do at home. And then we endorse you to the nearest rural healthcare facility that you could go to for consult while you are in the community. So, that is how we do the setup in the Philippines.

**Facilitator Koide:** Thank you very much. And any other questions? If I may then I'd like to ask my own question. So, we talked about the invisible disabilities, and at our center, development of disorders including autism has become a very important focus as Dr. Tobimatsu said. In Japan, these disabilities have been recognized, but only about 10 years ago, relevant laws and regulations were established, and various programs are now being implemented gradually. So, these kinds of new category of disabilities, so symptoms are invisible and not only medical services, but social services, and education, and local community activities are involved as well. So, there are so many stakeholders, so many people have to be involved in a network. So, we are still in a working process, so to speak, of establishing an effective model. Even though some local communities have some models, we are still struggling to find a way forward. So, because traditionally we have been focusing on physical disabilities, but would you please give us some comments on developmental disabilities. For example, Dr. Liao would you please share this with us, how you

have been working in China, when it comes to developmental disorders including autism? Dr. Liao.

**Liao:** Developmental disabled persons?

**Facilitator Koide:** Yes, including developmental disorders, like autism, spectrum disorder.

**Liao:** Because I am a urologic expert, so I have not this kind of experience. Maybe...

**Facilitator Koide:** I'm terribly sorry. Perhaps, Peter, would you please give us a comment?

**Poon:** Interesting because my wife is "NOT", so she works with autism and learning disabilities, so I know a little bit about that. So, I think in Hong Kong recently we have a new scheme under the government, and it sent OT and speech therapist to the school. So, the comment was when people with autism or with learning disability who ask them to come to the Rehabilitation Center or the Child Assessment Center to receive the service. And we find that it's not most effective, so we actually have "tried to" change in strategy instead having them coming to the center we send people to the school, to the normal school or the special school to provide the service. We've just started a couple of years ago, and I think the Government has decided to continue to the support and in a bigger scale as well. So, I think it all ties in with the movement of community rehabilitation development. So, instead coming to the center, send a base or institutional base. We move forward one step to make it available in the community by sending our autism therapist to the community. So, that's one thing that we have been working on in Hong Kong.

**Facilitator Koide:** Thank you very much indeed.

**Bundoc:** The identification of the autism spectrum disorder has been a big challenge in the Philippines, so when the package for children with disabilities was developed, we didn't really put any specific rehabilitation program that would really label it as autism spectrum disorder. The package was made in such a way that the management would be directed to the disability that was being seen, so it could be cognitive, behavioral, and communicational. And one way by which it could be detected early was implementation of a new born screening program which starts from birth of the child and then, as it goes through immunization, there is a check list that the community health workers have that would identify already whether there's problem



in behavior, there's problem in cognition, there's problem in communication and this would be red flags. If they are not identified during the period of immunization and they start to go to school, or in daycare centers, the health workers and teachers also have this check list, so that could be early identified or screened. After which, for the primary screening they are now referred to a pediatrician or a specialist who could do the special exams or tests that would really already identify them as having this particular disease or autism spectrum disorder. So that is one way by which we were trying to face the challenge of truly identifying and managing well children with autism spectrum disorder.

**Poon:** Okay, I have one more point. So, I just like to share now that the self-assistive system we have in Hong Kong. If we have a kid in a school, sometimes there are quite a number of kids with learning disability or some of them even have autism. Often the school doesn't know what to do, and the kids can bully against this kid because they don't understand. So what we do in Hong Kong is we have a program, called Kids on the Block which is a puppet show from the America, and we have been doing that for 20 years. So, we will be sending our volunteer's team go to the school perform this puppet show to let the kids know what is learning difficulties and they have interactions. The kids will ask questions and these puppeteers will answer their questions. So, by doing that, we are raising the awareness, the acceptance of the school, and understand what is learning disabilities or even autism. So, we are working not on the diagnosis or the treatments, but we are working on the society on accepting this type of disability so that we could have that inclusion in the school.

**Facilitator Koide:** Oh, thank you very much. Indeed, they were very important comment. Yes, we also believe that similar programs are very important. Yes, Dr. Takaoka please.

**Takaoka:** Yes, in the City of Yokohama and other municipalities, early detection of developmental disorder is promoted and the beginning of intervention including rehabilitation has been promoted, and also there are some students who have such these disorders even though they are in a normal class. So the teachers there, have to be educated. So, we professionals, visit schools, to raise awareness of teachers and employment support is important when these people are grown up, so we focus support particularly for people with disabilities being promoted, supported in employment, the stages in some municipalities in Japan. Thank you very much, Dr. Tobimatsu.

**Tobimatsu:** Yes, in the present presentation, early detection and early intervention was emphasized, but in addition as Dr. Takaoka said employment of vocational support for adults and also rehabilitation is required for all people who are grown up, but whose developmental disabilities haven't been found when they are children. So, such support is now being provided in this country, and also on China, I'd say that last year, we visited China, and also I don't know how to put it in Chinese but there is the outpatient section dedicated support for the developmental disorders, and the one of the support consultation services have been provided that has been in place already over the last 10 years. So, China has been very active in providing rehabilitation support, for people with the developmental disorders. Thank you very much.

**Facilitator Koide:** Thank you very much. Any further questions or comments? Yes, from Korea please.

**Lee:** Actually, developmental disabilities are in the categories for the mental health care system. So, if we identify autism or developmental disabilities, we mostly refer to the psychiatrists, and they have the training packages in their programs. So, I'm not really familiar with the program, but I think that's how they take care of it. They also have the National Mental Health Care Hospital. There's a center and then there's some regional hospitals too, so I think they coordinate in the service provision, but I don't think they have something like the vocational infrastructure and so on. I'm not so sure but it's covered by the mental health care system.

**Facilitator Koide:** Thank you so much.

**Nakamura:** Yes, I am Nakamura and working at NRCD, Prosthetist and I have a question on the information access to the overseas participants. I would like to know- I think that there's a kind of information and communication situation is very different among the countries, think when you get the disabilities or when you are injured, you may get very kind of nervous and threatened, and I think you would like to know their situation about the future. So in Japan, we have the internet and the websites, so therefore, people can search by themselves to get more information about their situation. I know that many organizations are trying to provide the kind of services. I think it is also very important how to reach the information to the users, who really need the service. I know that the internet is very useful; however, this is also occasionally bad. I'm, a Prosthetist and provide prostheses to amputees. Some of the users say "My teacher, well my trainer is the YouTube". So, they try to get the information from YouTube and not going to the experts. I think this is an

undesirable excessive behavior. So therefore, I would like to know the situation in each country.

**Facilitator Koide:** Well thank you very much, I think about this information and communication is also the new problems that we are facing so Darryl please.

**Barrett:** The information dissemination and sharing of knowledge, and what is good practice is crucial. In the country like Japan, like many countries in Asia, internet is available and accessible and quite reliable. If you look at the Pacific, it's a completely different story. Many people, in the general population have limited access to internet, so use of internet to share information becomes more challenging, and you have to question it. In terms of the type of information that's out there, I think it's good and bad because there is so much information available. We are talking about self-empowerment. Peter was talking about self-empowerment. There is opportunity for us to use social media, to use YouTube platforms, to use a variety of media to get the information about rehabilitation to the general community in an accessible way, but I think there's no real way of stopping misinformation because it just is such an open medium. But what we can do is look at how we can make our information from our studies and our centers and our collaboration more accessible so that at least in conjunction with perhaps not good information, there is reliable sources out there.

**Facilitator Koide:** Thank you very much, Darryl. How about you Peter and Dr. Bundoc ?

**Bundoc:** It is very important because patients would come to us amputees, and they bring a, a photo of the kind of prosthesis or orthosis they want. Usually, it's not compatible with their activity level, and there is also the danger that particularly with what we have now as 3D printing wherein they could 3D print an orthosis. It also poses the danger that it could be misused in the wrong way, and would give signals that you don't need a professional who is fully trained to fabricate the orthosis or the prosthesis and anybody can just do it. So again, uh, just like what Darryl has said, information should come from the right professionals and it is our, also our responsibility to be able to disseminate it so that the people who would need it would really be functional once they have their prosthesis and orthosis.

**Poon:** Hong Kong is terrible in this area as well because it has free information shut down. We are not doing any good at the moment but I have some observations that I can share. I think we are moving away from the internet in terms of the website, web page because, people are using less computer but they're using their mobile phone.

So they're using the apps more now. So I think in future, we'll see in the coming few years, I think there's a huge need to develop good apps so that people can access and by making apps I think that could be a little bit more specific as well. So, that's what we are doing in Hong Kong as well. We have developed a new apps for epilepsy client. When people have this epilepsy tic feet, often they don't know what to do. So, we have few of these apps to cater for their self-management. So, if you are interested, we can send you the link later. That's one thing. The other point I would like to use is I was in UK a few years back. They have been starting about health information and also I think we often say health information need to be provided or designed by professionals, but honestly speaking, our language are too difficult for the patients. So, being in mind that whatever the media we are using, health literacy is important. So, I think my view is, we are moving away from the internet, we rely more on the apps or give information but the key thing is person center, make sure our language and how we present is understand by the person that is going to read it. So health literacy, it would be really important.

**Liao:** In China, the people might get this kind of information by two processes; one in internet. Internet in China, we have the very strong researching website that is called the Baidu. Just get the keywords, and they get another terminology and another knowledge. The second point is the mobile phone. Now, mobile phone is very popular in China, so there are software we called WeChat. WeChat also is very convenient and very popular among Chinese people, so they can chat each other among different people, and the south or west and the north, east so whatever how long distance. So it's very convenient to use mobile phone so they get the information about the disability of that, this kind of knowledge. So, I think information is high, with high technology now.

**Facilitator Koide:** Okay, thank you so much and okay then how about the situation in Korea, Dr. Lee?

**Lee:** Well there's actually good and bad in this situation. The good thing is that they can get together in the internet platform as a peer group. There is a lot of peer support groups on the networks, and I think that's very helpful, but they also get a lot of information like high tech information such as WeWalk. They're also come along and say when WeWalk going to coming to commercial. Those are very informative and good stuff or maybe they can find information for exercises like there are very good YouTube videos too, but the bad thing is that they get the wrong information from the wrong sources, so it's very hard to correct the information sometimes. As a physician, when I have to educate the patients, I'll have to correct all the wrong information and get the right idea. My work will be doubled for that so,

but it's not a huge problem. I think there is something good about it too, so it can be a good information source, a good gathering platforms. That's it.

**Facilitator Koide:** Thank you very much. So, Dr. Takaoka or is there anything that you would like to add, Ds. Tobimatsu?

**Takaoka** No, I don't really have anything to add.

**Facilitator Koide:** Okay then I think it's about time. So, I see one hand up from the floor so please.

**Thompson:** Thank you very much for sharing your expertise with us today. My name is Shelley Thompson and I'm a Masters of Occupational Therapy student at the moment with the WHO (World Health Organization) regional office with Mr. Barrett. As Mr. Barrett's work is right across the whole western pacific region, so a lot of different countries in Asia and the Pacific. I was wondering if anyone could share their reflections on what work they may be doing with Pacific countries. We have so much expertise in Asia and you're very well-resourced as we saw with some of the presentations from Korea and Hong Kong, very well-resourced. I'm wondering if any of your organizations are working with any countries or organizations in the Pacific to build their capacity, as there are your closest neighbors but they are in a very, very different situation to a lot of countries in Asia at the moment when it comes to rehabilitation. Thank you.

**Facilitator Koide:** Anything who would like to answer to this? Please.

**Poon:** Hong Kong is such a small place so we just do small projects. So, Darryl was talking about forming a regional network so that even countries in the region can communicate and further work with future. So, I'll let him talk about that later. As far as we are concerned in Hong Kong, Monique, my colleague here, she's the director in our divisions of international in China project so with that names, that means that we have been providing training especially rehabilitations training to the professionals in mainland over the past 20 or 30 years, so there has been a long history of that. In the past 20 years because I'm an advocate on self-management so we have been going around to different places to provide trainings say in the mainland, I just mentioned in my slide, in my PowerPoint and then we have been invited by Singapore, to go there to share and to train the colleagues in Singapore. I've been to Taiwan so there are groups from Thailand. They are talking about this but because of the language barrier so that it's not easy to start. So, to address your

questions, I think we are open, our heart is there so we are very willing to share our knowledge or some of our experience whether it's good or bad.

**Facilitator Koide:** Okay, thank you very much and I also would like to add as well. Now, I have experience working for Ministry of Health, Labour and Welfare. At that time, we have conducted the meetings having all the islands in the Pacific come to Japan to hold such conferences. So, I think some of you may know of that but Japan is actually very active in engaging some of the Pacific Island people.

Now I think it's about time. So, we would like to get ready to close the session. I would like to thank all of your participation and I also would like to thank the panelists who have kindly answered to all the questions, and I would like you to give one big round of applause to all the people who have been very active today. Thank you.

Okay, thank you very much and I think we were able to understand the situation in each and every country so I would like to also thank all the panelists for your participation so please get back to your seats now.

## ***Closing Address***

**Setsu Iijima**  
**Director, Rehabilitation Services Bureau,**  
**National Rehabilitation Center for Persons with Disabilities**

Ladies and gentlemen, thank you so much for joining us today in this seminar organized by NRCD. The theme of the seminar today was that based on the world report on disability which was issued in 2011, and the objective of the seminar was to promote this world report. As you may all know, we have ratified CRPD, and this world report has been mentioned in the CRPD saying that and the vision, and how the people with disabilities are perceived, has been making a difference.

Therefore, I think the role of the rehabilitation has been also changing not only focusing on the physical function, but we are trying to intervene to the environment including introduction of making the more use of the assistive devices. In this seminar today, we know that all the countries have different history and different situation, but everyone is working hard on this issue of the rehabilitation.

Another point was about the aging society, which we, our country is also facing, and we say that 27% of the population is elderly. Therefore, we can say that Japan is a leading country of this aging society; however, this is not only the issue of Japan or the, or the developed countries. This is also another challenge of the developing countries as well. So based on that, how we Japan can tackle to our problem is that all the people, all other countries are interested in, and I think we were able to mention that point as well.

We are also working as a collaborative center of the WHO and we would like to continue our work as a collaborative center so we would like to ask for your further and continuous support on our activities and business, and thank you very much. I would like to announce the closing of the seminar. Thank you so much.

