International Seminar on

Multidisciplinary Approach and Workforce Development in Rehabilitation Fields

February 16, 2019

National Rehabilitation Center for Persons with Disabilities
Japan

(WHO Collaborating Centre for Disability Prevention and Rehabilitation)

Program

13:00

Opening Address

Yoshiko Tobimatsu

President of National Rehabilitation Center for Persons with Disabilities

13:10～13:50

Keynote Lecture

"WHO Support to the Rehabilitation Workforce in the Western Pacific"

Darryl Barrett

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

Break

14:00～15:40

Presentation

1."**Rehabiritation Workforce Trainnig and Service in Fiji"**

Maria B. Waloki

Head of School, School of Health Sciences, College of Medicine, Nursing and Health Sciences, Fiji National University,Fiji

2. **"International and Collaborative Prosthetics and Orthotics Education at Mahidol University, Bangkok Thailand"**

Kazuhiko Sasaki

Sirindhorn School of Prosthetics and Orthotics, Faculty of Medicine Siriraj Hospital Lecturer, Mahidol University, Thailand

3. "**Strengthening Multidisciplinary Rehabilitation & Health Workforce Education in Australia"**

Stephanie Short

Professor, Academic Lead Workforce Development Activities
WHO Collaborating Center for
Strengtheing Rehabilitation Capacity in Health Systems
The University of Sydney, Australia

4. **" Inter-professional Education for Undergraduate Students at Intenational University of Health and Welfare"**

   Masae Shiroma

   Dean of the School of Health Sciences, International University of Health and Welfare at Narita, Japan

5. **" Development of Human Resources for Providing Supports for Persons with Disabilities at the Colledge of National Rehabilitation Center for Persons with Disabilities"**

   Reiko Fukatsu

   Director, College, National Rehabilitation Center for Persons with Disabilities(NRCD), Japan

Break

16:00～16:50

Discussion and Q&A

16:55～17:00

Closing Remarks

Koichi Mori

Director, Rehabilitation Services Bureau, NRCD

Opening Address　Yoshiko Tobimatsu

Mr.Darryl Barrett

Ms.Maria B. Waloki

Mr.Kazuhiko Sasaki

Ms.Stephanie Short

Ms.Masae Shiroma

Ms.Reiko Fukatsu

Discussion facilitator　Hideki Yamada

Discussion

Closing Remarks　Koichi Mori

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Opening Address

Yoshiko Tobimatsu

President
National Rehabilitation Center for Persons with Disabilities

The National Rehabilitation Center for Persons with Disabilities has held international seminars every year as a part of our activities as a 'WHO Collaborating Centre for Disability Prevention and Rehabilitation'. This year, our theme is `Multidisciplinary Approach and Workforce Development in Rehabilitation Fields.'

'We have invited Technical Lead from WHO Western Pacific Region Office as well as experts from Fiji, Australia, and Thailand to speak about the current situation in their countries. Through our discussions, we will look at multidisciplinary rehabilitation and workforce development.

The WHO defines rehabilitation as a set of measures that is required at various stages of life and is integrated into treatment not only for individuals with disabilities but also for any individual in conditions that restrict life function.

As such, rehabilitation covers a diverse range of individuals, and we will require rehabilitation at some point in our lives. The aim of rehabilitation is to overcome restrictions in life function and to reacquire life function. To this end, not only individual factors but also social factors require intervention by rehabilitation. Multidisciplinary rehabilitation will also be necessary to achieve this.

In this seminar, the guests will speak about workforce development in the field of rehabilitation taking place in the Asia-Pacific region and Japan, and about the efforts made in order to overcome problems.

I hope this seminar will be a fruitful one for all of those who are present today.

Keynote Lecture

WHO Support to the Rehabilitation Workforce in the Western Pacific

Darryl Barrett
Technical Lead Disability, Rehabilitation and Eye Health
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
Post-graduate Diploma of Legal Practice
2010 Masters of Public Law
2008 Regional Coordinator/Regional Manager, Technical Unit, Handicap International Regional Office, Middle East
2007 Bachelors of Law
1996 Bachelor of Occupational Therapy

[Summary]

Rehabilitation is a health strategy for the entire population, including people with disability. Rehabilitation has benefits both individuals and their families that extend beyond health to other sectors such as social, education and labour. Rehabilitation has been found to reduce the length of stays in hospitals, decrease readmissions, and prevent costly and potentially fatal complications, thus helping mitigate negative social and health risks associated with prolonged hospital stays and health complications. Especially in the context of complex conditions that require intensive and highly specialized rehabilitation, cost savings in the health and other sectors may be realized in the long term, rather than in the short term. However globally, the health workforce available to support the provision of rehabilitation is very limited, impacting on the lives of individuals with health conditions and their families.

WHO is supporting the strengthening of the health workforce, through its new *Western Pacific Regional Framework on Rehabilitation*, which was endorsed by Member States at the 2018 meeting of the Regional Committee for the Western Pacific. This Framework will support countries to better understand rehabilitation workforce gaps and opportunities, to address current needs, and prepare for future priorities.

This presentation will provide an overview of the *Western Pacific Regional Framework on Rehabilitation*, and focus on specific efforts to address the rehabilitation workforce for countries in the Region.

WHO Support to the Rehabilitation Workforce in the Western Pacific Region

Darryl Barrett

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

Ohayo gozaimasu. That's about all of the Japanese that I can give you today. So thank you very much for coming and a big thank you to the NRC for hosting another international seminar. I am very pleased to be able to talk about on this topic because for WHO it's essential that we address workforce development if we are going to be able to meet the needs that we currently have and the growing demands that are on the way. It's impossible to talk about rehabilitation workforce without really understanding what rehabilitation is from WHO's perspective.

For the first time in about 50 years, in 2017, WHO held a global meeting on rehabilitation, and that was called 'Rehabilitation 2030: A Call to Action'. And at that meeting it was really about bringing countries together with development partners, with research institutions, with user groups to raise the profile of rehabilitation and to get some clarity about what we need to do in the next 15-20 years to really make an impact on improving the situation on rehabilitation.

Now up on the screen, there's a lot of information but I'm sure you will be able get these and take it away. Essentially, at that meeting we had 10 outcomes that we wanted to achieve with the combined effort from the countries and development partners and academics, etc. And will touch on some of those. And number six, is really about multi-disciplinary rehabilitation workforce because again without an investment on workforce we're never going to be able to meet the health challenges that the countries are now facing and will continue to face in the next 20-30 years.

At that meeting also, it was very clear that WHO needed to get some clarity around what rehabilitation is. In many countries, rehabilitation is still mixed up with disability inclusion. And so at that meeting a new definition for rehabilitation was put forward by WHO and that's 'rehabilitation is a set of interventions designed to optimize functioning and reduce disability in people

with health conditions'. So the focus is on function and on the individual, who has a health condition.

And also, at that meeting we put forward, we publish guidelines on how to strengthen rehabilitation in the health system because we know that without strong rehabilitation in the health system, it will not be strong anywhere outside of the health system. Rehab is delivered primarily by health professionals so we need to strengthen the health system in order to do that.

What we also placed on the rehabilitation was the recognition that rehabilitation is the part of universal health coverage. A universal health coverage is essentially about providing the health care that people need without causing them undue burden. So, it's getting them the medicines or the different types of interventions without causing them a financial hardship. It's also very important to recognize that rehabilitation fits along the continuum of care from health promotion, which are things like don't smoke, don't drink too much, don't eat too much sugar to prevention things like immunization and vaccinations, to curative intervention, so surgical and medical interventions.

Then there comes rehabilitation and then palliative care. So it's important that WHO reinforced where rehab sits along that continuum of care so that people as they age, and as they manage chronic illness, can get the different types of health interventions that they need. We see that also reflected in the health system building blocks.

So WHO for a long time now has focused our effort to poor countries by looking at certain building blocks in the health system. And you'll see in the slide that these different ones such as governance and leadership or financing. Rehabilitation relates to all of those but in particular, it's about strengthening service delivery so that rehabilitation is included in the health system that's put forward in countries.

This should be reflected at different levels of health system. In some countries, there's an emphasis on rehabilitation in the community or sometimes referred to as community-based rehabilitation. That's important but that's not the story of rehabilitation. Rehabilitation to be effective needs to be reflected at each level of the health system and at the same time it also needs to be reflected along the continuum of care from acute right through to long-term care. In all those phases and stages, there is a place for rehabilitation.

And why that's important is because for some countries in our region, the understanding of rehabilitation in part of the health system is really not very strong. There are some countries where the Ministry of Social Affairs is actually stronger and delivering more rehabilitation than the Ministry of Health.

So, to help some countries to develop a better understanding of how to be strategic in rehabilitation, we have developed a country support package. It's essentially four tools: The first tool is about getting a situation analysis on what rehabilitation, what the situation is for rehab in a particular country. The second tool is to help countries develop a strategic plan. Now ideally, we would want to see rehabilitation in a national health plan but sometimes the timing is out or it's just not practical. So the second tool is about helping countries develop a strategic plan for rehab. The third tool is about developing a monitoring framework for that plan because we know that the evidence around rehabilitation is very, very limited globally. We need to make sure that countries are able to monitor how their performance is on rehab so that we can understand on how to develop it in the health system. And then the last tool is really about helping countries to implement the rehabilitation interventions that they need. Another way that we're working on delivering support to countries is predevelopment of rehabilitation interventions or a package of interventions.

So essentially what we are doing is we're not focusing on the service like physiotherapy or occupational therapy. We're focusing on the types of rehabilitation interventions that are needed. So it's not it's not centered around professional affiliations, its centered around the health conditions that a person needs.

And so all of you may be able to relate to this scene in Australia for example, we will have jobs where there is a lot of overlap between different rehab professionals. Occupational therapy and physiotherapy is a perfect example where there is a lot of overlap and depending on the clinical setting you will have one setting where an occupational therapist is delivering hand therapy for example and then you go down the streets and it's the physiotherapist that's delivering hand therapy. So what we're saying is that we can afford to be guided around by our professional affiliations. We need to understand what type of rehabilitation is needed and then what type of interventions the health system can deliver and I'll talk a little bit about that kind of little bit more detail later.

Why that's important also is because the package of rehabilitation interventions is a way to help countries understand what we need to prioritize in terms of

rehabilitation at every level of the health system. For example, at the very specialized tertiary level of the health system we might see a very strong, highly specialized multidisciplinary team with equipment and you know, high levels of specialization. And so we can give guidance as to what is needed at that level. Obviously, you can't replicate that at community level for villages and for towns that are very far outside of urban areas. So we need to make sure that the interventions we advise at the community level tailored from the context of the community.

So the WHO working on interventions that would fit at different levels of the health system. And again, this is not looking at a particular service like speech therapy or prosthetic and aesthetic service, its looking at an intervention. So what type of intervention is needed around rehabilitation and then who might be best placed in a particular context to deliver that intervention.

Another way that WHO is supporting the workforce development around rehabilitation is through the GATE initiative. And for those of you who don't know GATE stands for the Global Corporation on Assistive Technology. It's a WHO led initiative to essentially improve access to assistive products for all those who need it. So things such as wheel chairs or crutches or hearing aids or spectacles because we know that I think there was a World report on disability that said, 'only about 1 in 10 people globally have the assistive products that they need'. So the WHO is working hard to support countries to develop or improve the delivery of assistive products within the health system and beyond.

The way that they're doing that is essentially through four areas. One is through Policy Development, so making sure that countries understand that they can't rely on charitable donations for example of wheel chairs and crutches because it's not sustainable and it doesn't always fit their need. So government must put policy in place to be able to deliver the rehab for these assistive products that they needed for the population. Then the actual products themselves. And in many countries, they rely on outside shipments or outside donations in order to get basic assistive products. So WHO is looking out ways to improve procurement. We have a major study going on in the Pacific looking in particular in six countries about some of the challenges that they're having to get assistive products, to procure or purchase assistive products.

Then these personnel. Again, assistive products need to be delivered or prescribed or provided by people who actually know what they're doing,

otherwise we can cause harm to people if they receive assistive products that doesn't fit or it's not good for purpose or its not maintained.
And WHO is working on training packages in order to get people the knowledge that they need to be able to provide that equipment.

And then the provision of assistive products. Again, it's important that we look at how a country in particular provides the assistive products needs to people who are outside of major centers. One of the biggest challenges we have in health care is how we serve the population that is outside big cities and outside big towns. It's very challenging even in countries like Australia where we often looked up for good practices, we struggle in role areas and remote areas to get the rehab results that we need.

So just to recap really that kind of quick rush through those first slides, rehabilitation is a health strategy. Rehabilitation is not about disability inclusion but it's really about improving a person's functioning so that they can perform everyday activities. We also know that rehabilitation is important and best delivered by the health system because it's about reducing the length of stay and getting better patient outcomes so that people are less likely to bounce back in the hospital or back into the health service if they didn't get the rehab that they needed. And of course, rehabilitation should be delivered along the continuum of care so that health services aren't just delivering medical interventions but that we help people return to function back in their communities.

So that's the kind of global overview of some of the directions that WHO is heading to support our approach to rehabilitation but I want to bring you a little bit closer to home now on the Western Pacific. And for those of you who don't know the Western Pacific Region, it is essentially made up of 34 countries and territories and areas and within that 34, there are 27 individual countries. WHO doesn't have country officers in all of those 27 countries and we don't have necessarily strong activities in all of those areas but that is our domain. That's who we are serving from the regional office.

So you can see its quite a variation of countries. We have countries like Japan and Australia and New Zealand that are very highly developed. And then we have countries like Cambodia or Solomon Islands or Fiji that have very different context and very different health priorities. So within that huge range of countries, we are working to find some common grounds and then we're working individual countries to try and support them in their own context.

Why this is important is because globally and particularly in our region, but globally we're seeing very big dramatic shifts in population, and in subsequent health conditions we're seeing a rapidly changing population particularly in our region and it used to be considered as aging populations were really an issue for high income countries like Japan or Australia or New Zealand and that reminds the fact. But what's not always realized is that for middle income countries like Fiji or Cambodia, their population is actually aging faster than neighboring high-income countries and their health systems aren't really oriented to deal with that now or in the coming years. And this is clearly a space for rehabilitation. So some of you may be able to see the issue now. We have a very weak rehabilitation workforce in the region, and we have an aging population. So countries are going to struggle in the future to address the rehab related issues with healthy aging.

On top of that, we see a dramatic increase particularly in the Pacific for non-communicable diseases. So that's diseases such as cardiovascular disease, diabetes, respiratory disease- they are all on the increase and there is a very big correlation between those diseases and a need for rehabilitation. Now one of the reasons why we're having aging populations and an increase in NCD's is because our health systems are actually getting stronger. People aren't dying so young and that's a really good thing but the flip side of that, is that people are living longer often managing chronic illness or impairment or they're experiencing disability. So our health system is stronger, people are living longer, but they've got health conditions. So we must be reorienting our health systems to include rehab to help people manage those health conditions and impairment as they age.

So, it's a pretty big challenge when you think about it because certainly for WHO since our creation in 1948 we have been focused on death and disease. We have been focused on making sure that we eliminate disease like TB and polio. And that's been really good and things have progressed. But now we have these other challenges of aging populations and non-communicable diseases. We have to change gears a little bit. And that takes a big effort. Because people haven't been thinking about these things.

Like I said, it was 50 years between global rehabilitation meetings in WHO. So we have a bit of work to do ourselves at getting countries to understand the need to include and consider rehabilitation in health systems. And this is important because we know that there is a current shortage of health professionals in just about every country we go to and by 2030 this is going to get even worse. And that's felt, that global shortage of health workforce is felt even more in the

rehabilitation space. We know just in our region, with aging populations and noncommunicable diseases or NCDs, that the demand for rehab is growing.

So let's have a little look at what we do know about the global situation. So we know that prosthetist and orthotist are very underrepresented in just about every country. In our region, we're no different. We fare quite poorly in terms of the provision of prosthetic and orthotic technicians and professionals.

Actually, I'm going to show some slides that really, I could just show one that says we're just, we're not really doing enough, but I'll flick through them so you get a sense. So this next slide is around occupational therapy and the occupational therapist profession. Again, in the Western Pacific, we are high among other regions, but we are far below what's recommended in terms of the provision of occupational therapy. Similarly for physiotherapists, and it's pleasing in every single country in the Western Pacific, we have physiotherapists. That's great. But we don't necessarily have any other rehab professions in those countries.

So think about that for a moment. And I'll give you an example of Tonga. It's about to change with some new graduates coming or if they may have just come online. But last year, until last year, the physiotherapist workforce in Tonga was two people. Two physiotherapists for the entire country of Tonga. And then the interesting thing is that during football season, which in the Pacific, actually we love our football all over Asia Pacific, but during football season, one of those physiotherapists would go traveling with their Tonga national team. So you had a 50% reduction in your rehab workforce at the hospital, which left one physiotherapist during football season. If you lost 50% of your nurses or 50% of your doctors, it would be an outcry, it would just be unacceptable. So in the Pacific in particular, we have a really profound shortage of rehabilitation professionals. Physical and rehabilitation medicine doctors is interesting because I think there used to only be one in Fiji for the entire Pacific. And in other countries there would be a peppering of rehab doctors except Mongolia. Mongolia have more rehabilitation doctors then other rehabilitation professionals.

And if you think about the role of doctors in the health system, doctors usually run the show. Doctors usually run the hospitals. They usually run the ministries and they usually lead on setting policy. So it's important that we have doctors understanding what rehabilitation is. And right now it's a very poor understanding across many medical professions around what rehabilitation is.

So we have a role to socialize and to educate what the benefit of rehabilitation is. So in the Western Pacific, we have some data. It's a very limited, but we do have some data from a survey that we did in 2015.

In 2015, we surveyed 27 countries and received 24 submissions back to WHO, and we asked a few different questions about the rehabilitation workforce. So I thought I'd just share a bit of a snapshot with you. So as I mentioned, there's a very, very limited rehabilitation workforce in just about every country in the region, particularly in the middle-income countries. For high income countries like Australia or Singapore, Japan, there is a good rehab workforce, but still there is shortage in different areas. In Australia, our rural and our remote areas often find it very challenging to get staff to work in those areas.

We also know that, the rehabilitation workforce is not only weak in numbers or limited in numbers, it's also quite limited in its capacity to develop. If you have the workforce like I explained in Tonga, the ability for those two physiotherapists to advocate for more and increased rehab services is very, very limited. So instead, you get into this cycle. We also found in the survey that there needs to be greater knowledge around what rehab is. We need more attention on how to address the challenges of the rehab workforce because at the moment in the health system, rehabilitation is not always considered as part of what the Ministry of Health should lead on.

If we look at Cambodia, in Cambodia, the majority of rehabilitation is delivered by the Ministry of Social Affairs and that's grown up out of the history around disability and the conflicts and landmines. But the projections of health care needs in the next 20 years in Cambodia mean that less people will be affected by landmines and more people will be affected by aging related health conditions, noncommunicable diseases and injuries. And so the workforce needs to shift from centers that focus around landmines back to hospitals and the health system. And there's a big journey for that to take place.

Countries also reported difficulties or shortages in every rehabilitation category. And many countries didn't even have data to share with us. Some countries didn't know how many professionals we're working in rehabilitation. Some countries just knew that they graduated certain numbers, but they didn't know how many were actually employed as a rehab professional, even if they graduated as one because there's not always jobs to go with the graduates who come out of many of the institutions.

So again, you can find this information online on our website. (WHO/Rehabilitation and Disability in the Western Pacific page29,30） So don't worry if it's too small for you to read or you can't access it now. But all of this is on our regional report. And again, in our region you see the high-income countries, New Zealand, Australia, Korea, etc., doing okay when it comes to physiotherapy and then it drops right down. Particularly when you look in the Pacific.
Again, for rehabilitation professionals, you'll see Mongolia is the very first one that I mentioned because they train a lot of rehabilitation medicine doctors in Mongolia. But again, it drops down in terms of the distribution.

So we asked countries, what are they doing to actually alter or change or improve the situation to get more rehabilitation professionals working. And really it was a mixed, it was a mixed response from trying to open up more posts to providing government scholarships, to recruitment. But the common thread through all of that is that rehabilitation was not always seen as part of health workforce planning, particularly in middle income countries. In high income countries, rehab was included in health workforce planning, but in middle income countries it was very rarely included, which then again sets up this cycle because rehab is not in health planning. Therefore, these positions can't open, budgets can’t be allocated and the awareness is just not there.

What was also interesting is rehabilitation was not seen as a very attractive career, which is understandable when you think about all the challenges that a new graduate or a rehab professional may face.

So in the last few minutes I wanted to talk a little bit more about what WHO is focused on in the coming few years to address some of those challenges that I mentioned. So a lot of what we do now until 2030 is very focused around the sustainable development goals because there are specific targets around the SDGs that we are supporting countries to achieve. And one of them is around the health workforce because we know that is a huge challenge. Also, as I mentioned right in the beginning there were at the Call for Action, one of the recommendations or the outcomes that we as WHO want to see is a stronger focus on a multidisciplinary rehabilitation workforce.

On the slide now are two documents that give an overview of challenges and recommendations around the health workforce and essentially some of the key things that they say. One of the key things that they say is around competencies. So competency is something that we attain when we are looking at delivering a

particular type of service. It's a way that we can measure how rehabilitation is progressed or developed.

And it's something that WHO has started working on in the last couple of years. And actually one of Stephanie's students is working very closely with our WHO headquarters to develop a rehabilitation competency framework. I apologized for all the jargon in my presentation for all the translators. But essentially what WHO was saying is that it's not about focusing on a profession like physiotherapy or speech therapy. It's about focusing on what a health worker needs to competently be able to do, proficiently be able to do in order to deliver a rehabilitation intervention. So I'll say that again, it's not discipline specific. It's not about a rehab profession. It's about building the competency or the ability for a health worker, including a rehab profession to be able to implement a rehabilitation intervention.

In the past, there's been a lot of focus on professions, but now we recognize that we need to focus on the types of interventions, whether it's balance work or mobility or cognitive. Whatever the intervention is needed, that's what we're going to focus on.

And really by focusing on the competencies were better place to be able to meet the demands of countries in the future. Because there's a lot of overlap, as I'm sure you will know, between different professions. As I mentioned earlier, you can go to one hospital and it's the physiotherapists who run the hand service or the hand therapy service. You go to the next town. And that's the occupational therapist that run the hand service. But within that particular service are very similar competencies. And so we're looking at what competencies are needed in order for that rehab to be delivered to someone who needs it.

And so what the global level? We are looking at developing a global competency framework. We really love big worlds in WHO. So we're looking at a competency framework that will help countries to understand the types of rehabilitation skills that are needed in order to deliver the rehab interventions. And that will eventually filter down to country and local contexts. So that in a country like Fiji, or in a country like Cambodia that has particular issues and particular priorities, we can adapt the competencies to fit the current workforce, the projected work force, the current priorities.

But we start from that global competency framework. So there's a bit of a timeline up on the screen. Essentially were aiming to get this work done by the

beginning of 2020. By 2020 we would like to be able to present a global competency framework, which says, these are the types of skills that a health worker needs to be able to deliver rehabilitation. We're not saying this is what you need to do occupational therapy or this is what you need for P&O. We're saying, these are the skills you need to deliver the types of rehab interventions.

I'm just going to skip through now, see if our friends can keep up on these slides. One important feature I'll finish with is that in October last year in Manila, we had our annual WHO regional committee meeting. And that committee meeting happens every year where all Ministers of Health come to Manila for a week to discuss priority health issues. And we put forward an agenda item on rehabilitation and we passed a resolution and there was endorsement of a regional framework on rehabilitation for the Western Pacific. And it's the first framework of its kind on rehabilitation at any regional level or even the headquarters level for WHO.

So this framework is guiding member States to strengthen rehabilitation in health systems and we're just awaiting the signature of our new regional director who happens to be Japanese. Congratulations. And that regional framework should be published in the coming weeks and that will form the guide around how we support countries in a range of issues in the health system for rehabilitation including workforce development.

I know I've got two minutes left so I just want to go over some of the actions in that framework for you to think about. So we want countries to undertake an assessment of their workforce so that we can look at how we can better plan. We also want to make sure that countries include this planning in the broader human resources for health planning. We also want to make sure that rehabilitation can be delivered by non-rehab professionals. In many countries, it'll be decades before we have the rehab workforce we need. There are many interventions that are already being delivered by non-rehab professionals.

So we want to make sure we support all health workers to deliver priority rehab interventions. We also want to make sure that we develop professional networks because the professional networks are essential if we want a confident workforce that can advocate for continued strengthening, and professional associations are very limited in our region at the moment. We also want to make sure that there are resources allocated for countries to develop their workforce.

And to respect time, I'm going to wrap it up there, but I'm sure you'll be able to access these slides, and if you're not, then please get in touch with me and I can send them through and happy to answer any questions later on. So thank you very much.

Presentation

Rehabilitation Workforce Training and Service in Fiji

Maria B. Waloki
Head of School, School of Health Sciences, College of Medicine, Nursing and Health Sciences, Fiji National University, Fiji

[Biography]

1971 - 1973	Certificate in Physiotherapy, Fiji School of Medicine (now part of the College of Medicine, Nursing and Health Sciences, Fiji National University
1983 - 1985	Diploma in Physiotherapy, Otago Polytechnic, Dunedin New Zealand (now Bachelor Degree at the University of Otago)
1994 - 1995	Master of Health Science Education, Cumberland College of Health Sciences, University of Sydney
2001 - 2006	Post Graduate Certificate in Health Services Management, School of Public Health, Fiji School of Medicine Certificate in Operational Research, SORT IT: (The Union, WHO, TDR, SPC, CPS, Global Fund, LuxOR), Ministry of Health Training, Fiji Post graduate Diploma in Health Informatics, University of Otago

[Summary]

Rehabilitation workforce training and service in Fiji started in the 1960s. Physiotherapists were trained at the Fiji School of Medicine, the main health care professionals' training institution for Pacific Island countries. Physiotherapy (PT) training progressed from the initial certificate and diploma level programs and continues today as the four-year bachelor degree of physiotherapy.

The training of community based rehabilitation workers (Community Rehabilitation Assistants - CRA) started in the 1990s as a Save the Children Fund, UK project. This training was undertaken by physiotherapists, occupational and speech therapists in collaboration with Ministry of Health nursing and physiotherapy personnel. CBR worker training is now offered by the School of Health Sciences, the College of Medicine, Nursing and Health Sciences, Fiji National University, to Fiji and Pacific Island countries.

The training of rehabilitation workers, both therapists and CBR, have undergone changes over the years in response to the expanding needs of persons with disabilities and models of rehabilitation and CBR. However, the Fiji Ministry of Health and Medical Services' (MHMS) service provision model remains a hugely clinical based medical one. Rehabilitation is provided

by MHMS physiotherapists at the main hospitals with no community based rehabilitation service. Current PT service has extended to the sub-divisional hospitals using the MHMS rehabilitation service model. The Ministry of Health Community Based Rehabilitation worker (CRA) service begun with the training of CRAs around 1996 and their posting at Health Centres around Fiji. Their role was for early identification and intervention of at risk infants and children with disability in the communities. Based on needs in the community, this role has expanded to include all persons with disabilities, and this continues today.

The training of physiotherapists continues at the Fiji National University with an average of 20 graduates annually, most of whom do not immediately find employment. CBR worker training was halted two years ago as the MHMS was not providing employment to graduates.

Thus the “wicked problem” of rehabilitation workforce development and service provision in Fiji: referring to graduates having limited opportunities for employment due to the restricted number of service positions for both physiotherapists and CBR workers, directly impacting rehabilitation services.

Rehabilitation Workforce Training and Service in Fiji

Maria B. Waloki

Head of School, School of Health Sciences, College of Medicine, Nursing and health Sciences, Fiji National University, Fiji

Good afternoon to you all. First of all, I would like to express my gratitude and thanks to Dr. Tobimatsu from the National Rehabilitation Center for the invitation and also to Mr. Darryl Barrett, WHO, technical officer for suggesting the participation from Fiji. I was really surprised about the invitation but glad. Somebody said, "You will be going all that way to give this 20-minute talk?" I said, "Well. it must be important. It must be fitting into the oral picture of things. So, I'm really glad to be here and I have 20 minutes to share with you an update on what's happening in Fiji considering the rehabilitation workforce education and also the service there.

This outline, I'd like to give you a bit of a picture of the rehabilitation workforce and service in Fiji. The Fiji's School of Medicine started training physiotherapist, who are the main rehabilitation workers in Fiji in the 1960's. And then it progressed on to the Fiji National University now from a certificate been onto the bachelor and so forth. And also, it started training using this program, the Certificate in Disability in Community Based Rehabilitation.

And I'll talk a bit about the problems about education, educating rehab workforce and the service and then I'll focus on the service itself, where it is now, where it was and why, maybe some suggestions for the way forward.

I will now give this picture of Fiji just to show and demonstrate and refresh your minds of where it is. It looks very big up there, actually it's a pinhead on the world map and then it's divided into divisions, population of about 918,000 so a lot of mobility in the population of Fiji. So it's moving up slowly but that's where people are. But the concentration of course is in the main islands.

In terms of education, it started to offer the Certificate in Physiotherapy, the focus was in response to the polio epidemic in the 1960's when New Zealand's physiotherapist came to Fiji to assist the rehabilitation of polio victims at that time. Then the education in Physio started in the Fiji School of Medicine. That went on for quite many years educating Physios in Fiji and the Pacific. Then in 1996 was the diploma. This then started to expand the role of Physios and where

they work including more sports because Fiji was now participating in world sports in most events.

Thus, Physios started being part of the sporting teams and at that time as well was the ability to go and serve in the community in terms of CBR because of the Save the Children Fund begun with the Ministry of Health and with the Children's Society to train rehabilitation workers specifically for identification and early intervention of infants with disabilities. Because they usually meet up with the Children's with Disability and often have deformities because of the lack of early identification and management.

And then in 2010, the Bachelor came in to event and that's in the Fiji National University and then the thinking of the function of the physiotherapist, they need to be meeting the needs of persons with disabilities. So when they went, they got a tool box of meeting all the particular needs thus we started this relationship with the Interplast Australia where we train them in a one-week intensive short course usually with the families and students. It also turns into a regional training for Physios or clinicians around the region to come up and train as well particularly in the area of rehabilitation after tendon and veins, tendon injuries, veins, cleft lip and plate surgery. So, it's quite specific.

Prosthetics and orthotics also within the University of Melbourne, University of Sydney, in the management of diabetic foot sepsis which is many particularly following the increasing number of people with diabetes in Fiji. And so that we'll have less amputations by healing the diabetic foot sepsis. This coming to the training of physiotherapist also working with Motivation Australian, and WHO using the WSTP basic and even intermediate wheelchair prescription training.

All for the same purpose to skill them for appropriate interventions of increasing number of persons with diabetes and strokes and often this work is with the other organizations like LDS Charities, which is Latter-Day Saints, CPA sort of repulsing lines Sydney, Motivation Australia. They provide the assistive devices like wheelchairs and other expertise of the increasing numbers and of course the CBR service in the communities.

As for physiotherapists, I was really enlightened and I agree with Mr. Barrett's discussion, is to train them to be competent, to intervene on the needs of persons that need rehabilitation, whether you are a physiotherapist or outpatient therapist or speech therapist, it really doesn't matter as long as you

meet the needs that they have. In Fiji, and particularly the physiotherapist are the ones that are able to get employment.

Then we have the CBR training, it's one-year duration and it's under the Ministry of Health. Of course, it started early with the Save the Children Fund UK, commissions of the Ministry of Health and also Fiji School of Medicine at that time, now Fiji National University. And also, the collaborating partners like Cerebral Palsy Alliance scaling up and strengthening the rehabilitation workers in the community for their work.

The current status, this training is now being suspended since 2016 because the Ministry of Health who employs them doesn't employ them anymore. They cannot confirm for me at this stage when this training will be resumed. One of the issues here I was speaking with the rehab specialist at the National Rehab Hospital and she said, she could not. But I'll show you some figures later even the numbers, the small numbers of vacancies, they cannot because those who have graduated are uninterested so they did not apply when vacancies are open.

Thus, we call it, the wicked problem the Rehabilitation Workforce Education for Physiotherapist and CBR workers in Fiji. This came back when the WHO collaboration center for rehabilitation in the university Sydney particularly Dr. Michael Millington and Michelle Villeneuve, with myself, at the Fiji National University, and Goretti Pala from the Solomon Islands National University. We collaborated on this together for a desk review of the rehabilitation services in the Asia and the Pacific. We came to the conclusion, this was a complex and intractable problem that appears impossible to resolve because really there was a great palpable need for carriage of services under the matrix in terms of disabilities side, let alone the rehabilitation side of health side. But there's no clear articulation of the current profile of need and what the service should look like or the priority in what to do. Nobody does seem to know what is happening though the need is there and also there is a limited number of physiotherapy and CBR positions. It is static. You're either there, there's a space if somebody leaves for migration or actually dies. So graduates from our University really had a problem when finding employment. So, I'd like to use Michael's words: "A problematic logic model is grinding CBR" and I add physiotherapy "to a halt." Because we know this next paragraph is absolutely true.

Community need drives practice. Practice drives knowledge and skills. Knowledge and skills drive evidence. Evidence, you know all that. And it comes

right back to education, we're educating for what service? And that service should inform education and overall that is governance. It's a real wicked problem. I was informed by the Dean of my college that the prominent Secretary for Health was just questioning "Why are you still producing physiotherapists?" I did not say anything to that because there's an obvious need for the increasing number of persons that need rehabilitation and the physiotherapist can offer that.

So these are some figures on the rehab workforce, the numbers were produced since 2014 and until now, just five years. So from eight the numbers are increasing and they fluctuate up and down, 2018 we graduated 26, actually 29 but 26 for Fiji. The graduates, the down numbers that's for Fiji but total that includes the regional. So I just put in the regional ones. Look at the numbers that are employed. So there are many physiotherapists graduates who are sitting out there, not providing rehabilitation just needed for our people.

This year, we got a little more than 82 numbers enrolled Year 1 to Year 4, we've got a 4-year program. We don't have any CBR students because we stopped taking them in beginning in 2016. And these are all sponsored by the government. If they apply, we accept them, they are sponsored. You can ask some more questions on that.

Now, I'd like to talk about rehabilitation service. This is to highlight the two ministries that I'm involved in terms of in Fiji at the service. The Ministry of Health in Medical Services usually by physiotherapists in the main hospitals. Also in the health centers by community rehab assistance, we call them the community rehab workers. And then we have a National Rehab Hospital, at the moment they've got one physiotherapist and the other one is a Japanese, JICA volunteer. They've got a team of three or four technicians in the P&O area.

In the Diabetic Hubs, there are three, one in Suva, Lautoka, and Labasa. But actually, they don't have any rehabilitation specialist there but they've got the hubs. Can I just tell you that the Ministry of Health doesn't have any procurement budget for anything apart from rehabilitation thing except for employing physiotherapist and community rehab assistants?

The Ministry for Women, Children and Poverty Alleviation, this is a line ministry for disability in Fiji. They've got disability officers, these are non-professionals, they do home visits and assist needs and refer. They're really effective and they're really working a bit more, because they're working with

DPO's, Disable People Organizations and also, we're part of that collaboration, Fiji National University, because we trained their people like in the WSTP Training Service. They had a budget for procuring mobility devices and they buy wheelchairs. The Ministry of Health doesn't buy the wheelchairs really, they buy the standard orthopedics for the hospitals.

And also the NGO's, are involved, particularly the Spinal Injury Association, and they used to offer integrated disability service like wheelchairs, walking devices, and urinary management project with the Motivation Australia for those spinal injured patients that need that care and in collaboration with LDS Charities, PhysioNet UK, CPA Sydney for donation of equipment with FNU, with us at the college, is for training their people in the use of those devices.

They will lead in the implementation of the Rights of Persons with Disabilities Act 2018 in Fiji because Fiji has just done that in 2018 and also ratified the UNCRPD. And of course, we have the faith-based organizations, they bring in the chairs whether it fits or not as long as they meet the needs to be mobilized there. So, the Spinal Injury Association is sort of the national provider for mobility devices. You know I'm taking a lot of the work. And of course, the Hilton Organization is more from the education perspective. However, they have two physiotherapists, two rehab workers, and if they have a speech therapist that will be there, if an OT, it will be there.

This is just to show you a picture of Fiji and some divisions that it serves and I hope that thing is to realize the logistical problems of mobility and movements in the same, mostly rural population. This is just to give you a number on physio and community rehab workers as of January 30, 2019 in the physiotherapy establishment for the whole Fiji with a population of over 900,000 we have 58. This is where we're at, the three main subdivisions 27, in the central, serving that population. In the Western division 21, in the northern division 10.

The positions that are filled are 43; they're not even all filled. The vacant is 15. I hope and I know the vacant positions should be filled by the new graduates that are coming out. However, they're already planning and I really like that because by 2029, we are hoping to increase to 119. For me, it still very small in number, anyway. The CRAs, the community rehab workers they are 18, filled positions are 12, they're finding difficulty to fill because nobody applies when the positions are advertised because nobody is interested anymore, its lack of visibility and all.

Okay, what is the way forward? I would like at the end of the discussions for recommendations, for suggestions, and assistance because it's a lot of things happening in and looking forward for a lot of papers and the studies have been done but really not much on the ground. It really frustrates me.

In education, we'll continue to education of physios and CRA's but we need to have a profile of the knowledge and skills and abilities that they require for their roles to meet the intervention needs and for them to be able to offer a holistic integrated rehabilitation and we are working with the University of Sydney. We should put online an education for rehabilitation workers not only for Fiji but in the region. In terms of the service, there's a need for multiple levels of intervention, multiple levels and cross-sectoral levels.

And also, we desperately need a coordinated network of governance. Somebody needs to take lead and I've always believed it's a line ministry. Well, that's in terms of disability because as one responsible for the government in realizing the UNCRPD. They could tell the Ministry of Health, "yours is rehabilitation, get on with it."

And all the others, and of course with the workforce development strategy and maybe promote CBR and CBID ultimately, "The Pacific Way" where everybody's involved particularly working in a limited resources area and nation like Fiji. It's a great challenge but we can neutralize the Fiji family and community empowerment as structures that are in placed to develop and to strengthen rehabilitation in the Pacific, between the needs of persons with disabilities.
Thank you.

Presentation

International and Collaborative Prosthetics and Orthotics Education at Mahidol University, Bangkok Thailand

Kazuhiko Sasaki
Sirindhorn School of Prosthetics and Orthotics, Faculty of Medicine
Siriraj Hospital, Lecturer, Mahidol University, Thailand

[Biography]

Education:

1992- 1995	Diploma in Prosthetics and Orthotics, College of National Rehabilitation Center for Persons with Disabilities, Japan.
1995- 1999	Bachelor of Science in Physics, Tokyo University of Science, Japan.
2000- 2002	Master of Engineering, Tokyo University of Agriculture and Technology, Japan.
2002- 2005	Ph.D. of Engineering, Tokyo University of Agriculture and Technology, Japan.

Working experience:

1995- 2008	Prosthetist and Orthotist at National Rehabilitation Center for Persons with Disabilities Research institute, Department of Prosthetics and Orthotics Japan.
2009- 2011	Lecturer at Kobe College of Medical welfare, Prosthetist & Orthotist course
2011- Current	Lecturer at Sirindhorn School of Prosthetics and Orthotics, Faculty of Medicine Siriraj Hospital, Mahidol University

[Summary]

It is a great honor for me to speak at this international seminar hosted by the National Rehabilitation Center. I am also a graduate from the College at the National Rehabilitation Center. Before my presentation, I would like to express my deepest thanks to Dr. Yoshiko Tobimatsu.

In this seminar, I would like to speak to you about our experiences in our international collaboration program. Our school which was named Sirindhorn School of Prosthetics and Orthotics (SSPO) was established in 2002 under the jurisdiction of the Ministry of Public Health. Our program became the first Bachelor of Science (BSc) in Prosthetics and Orthotics in Thailand through support and cooperation with the Nippon Foundation.

Our 1st cohort graduated in 2006, and thereafter, SSPO moved the Bachelor program to the faculty of Medicine Siriraj Hospital Mahidol University. In 2007 our 4-year curriculum was adjusted to be congruent with the International Society for Prosthetics and Orthotics (ISPO) and World Health Organization (WHO) guidelines for the training of Prosthetics and Orthotics personnel.

In 2010 an international program for a Bachelor in Prosthetics and Orthotics was established.

Since the approval of the ISPO category 1 certification and adoption of WHO guidelines, our global collaborations and academics have accelerated. One example of this is the establishment of an international-distance learning course, an advanced private Center of Excellence Clinic and a Master Degree international program in prosthetics, orthotics and pedorthics. SSPO is a member of the ISPO Global Education Network (GEM) and ASEAN University Network- Health Promotion Network (AUN-HPN). Participating in these organizations assists SSPO in maintaining quality educational standards and an international dialogue.

An important component of a successful international program is to embrace various cultures and ethnicities, educational backgrounds and religions. We have maintained a cohesive program because of our ability to view multicultural differences as benefits to each other. Our international faculty and students provide our program with unique perspectives which help our program immensely.

In our evaluation system, not only the students but also each subject and instructors are evaluated by students twice each semester. We say to every student that they are family and that SSPO is a central hub of P&O education. We understand that we are positioned as the ideal setting for global capacity building in P&O. Currently we are continuing to develop our human resources and educational offerings through the growth of our distance learning and graduate level programs.

International and Collaborative Prosthetics and Orthotics Education at Mahidol University, Bangkok Thailand

Kazuhiko Sasaki

Sirindhorn School of Prosthetics and Orthotics, Faculty of Medicine Siriraj Hospital, Lecturer, Mahidol University, Thailand

Ladies and gentlemen, I thank you. And I am very honored to be with you. I am a Japanese but I have been working in Thailand for the past eight years at the School of Prosthetics and Orthotics at Mahidol University, Thailand.

I would like to show you the basic information about Thailand. And then I'll talk about our division, my school of Prosthetics and Orthotics, and I'd like to touch upon International and Collaborative Prosthetics and Orthotics Education at Mahidol University. We do some long-distance or remote education as well so I would like to share that with you too. And further, I would like to talk about how are the status of the students and the alumni. Of course, I will be talking about background of the SSPO, my school. And then lastly, I would be talking about key aspects of an internationally collaborative education program.

Now, this is Thailand and you can make a comparison between Japan and Thailand like this, see. Well in terms of the area, Thailand is far bigger than Japan but population wise, it's a little more than half of the Japanese population. The population with physical disabilities, it's about 1/5 of the number of physical disabilities in Japan and the country is considered as the upper middle-income country now. Nowadays, the country is no longer called as a developing country. It is considered more like a country, which is close to advance to industrialized country.

Now in this country of Thailand there's Mahidol University, and there's several campuses throughout the country. In the City of Bangkok there are three campuses. The Bangkok Noi Campus, this is where the Faculty of Medicine is located and this university is the first university, which established the Faculty of Medicine. The Dean is Professor Prasit Watanapa and there are five faculties and the to become a doctor requires six years of education, and also if you want to be a Bachelor of Applied Thai Traditional Medicine, you need to be educated for four years. And another faculty is for Prosthetics and Orthotics Program that also requires four years. Then Technology in Medical Educational Technology, that also requires four years and for Nurse Assistant it requires one year of education.

And see this, this is Dr. Nisarat, who is the Director of our faculty. Well our division is called Sirindhorn School of Prosthetics and Orthotics (SSPO) and you may be wondering why this is called School of Prosthetics and Orthotics and I'll explain later on.

At SSPO, we have the education part, standard clinic, practical-clinical part, and advanced clinical part. And I would like to explain each one of them. Twenty-four teachers were instructors, out of them are 22 Certified Prosthetists and Orthotists. Including myself, there are three expatriate who lecturers. Dr. Gary from the US has a PhD, he's here. And also, we have a PO with master's degree, and a PO Bachelor, six of them. We also have two specialists in PO and ABC in Pedorthics. And well there is a colleague from Tanzania as well. Further, we have 18 technicians, and in total for Orthotics and Prosthetics we have in total 36 professionals.

In addition, we have the CEPO Advanced Clinic and well we have this collaboration between Mahidol University and the Scandinavian Orthopedic Laboratory. And for pets even like dogs and cats, and also synthetic arm or breasts or synthetic eyes, all of these are made or developed here in collaboration with Swedish-Scandinavian Laboratory, and it's a clinic. So our school or our division consists of these three teams.

Now I would like to touch upon the background of SSPO and Global Education, why SSPO was established. Back in 2002, within Sirindhorn National Medical Rehabilitation Institute was introduced the very first 4-year PO program in Thailand. Well there was a big help from the Nippon Foundation and Dr. Eiji Tazawa. And at that point, there was called Sirindhorn School of Prosthetics and Orthotics (SSPO) and well Sirindhorn, this is the name of Her Royal Highness Princess Sirindhorn in Thailand and we're honored to have her name, so it's called the Sirindhorn School of Prosthetics and Orthotics, and that was the start.

And although it is called school but it's more like a division of Prosthetics and Orthotics. And then in 2006, well they decided to be certified with ISPO, International Society of Prosthetics and Orthotics, ISPO Category I. In other words, SSPO decided to be certified with the world level, a world class educational level. And accordingly, that was transferred to Mahidol University.

By ISPO educational standards there are three categories. CategoryIII is the basic one, prosthetic-orthotic technician. And Category II is a little advanced, this certifies a person with the Diploma of Associate Prosthetist and Orthotist. And then Category I is the best level, highest level, Certified Prosthetist and Orthotist you can become. And so you have to complete all the programs for evidence-based practice and a very reliable outcome learning. Also, you have to go through research and clinical applications and technical procedures as well.

SSPO students aim at becoming certified with Category I, ISPO Category I. And then later on, in 2009 well after three years of working on this, the school was certified or recognized with the Category I, and after that the school began the international program in 2010.

Now further, after getting this certification, we started going international or global. And one of the first projects that we worked on was the collaboration with the Alliance of Prosthetics and Orthotics Schools, so the Cambodia School of P&O in Cambodia, Sri Lanka School of P&O, Vietnam, Indonesia, Philippine, Myanmar, you see all these schools and we worked in collaboration. We held annual meetings, we had staff and students exchange, we shared educational contents.

In addition, we started deploying distance learning programs through the collaboration with the German NGO called the Human Study. And with this, we could start helping or supporting Category II programs in Eastern Europe, the Middle East and Africa. And so far, we have had admissions and the people who completed in the program from these countries as you see. And in the picture, you can see the first graduates of the program.

And thirdly, we have another collaboration project, this is called ISPO Global Educators Meeting. This picture was taken in September. We had the meeting in Germany in September, and 126 people participated in GEM 2018 representing 37 different countries. This was also quite meaningful and helpful to improve communication and collaboration between P&O schools and also to share educational contents, student and staff exchange, and so on.

Now through all these different programs, what kind of people became students and what are they doing now. Here you can see the nationalities of these students who were learning at SSPO. Well mainly from Asian countries but we have a few from Japan as well. And also, we have students who were taking the Distance Learning Program from Europe, from Africa, from Afghanistan. So currently, there are 23 countries sending these students to the SSPO. So far, we have had 281 graduates from SSPO and about 30 also per year from SSPO including international students. Well in Japan we have about 10 P&O schools, and every year we have 200 students who have completed the program.

Here you can see the graduate employment survey, what they're doing, what kind of a career they're getting. On the left you can see the result of the Thai graduates, 135. And on the right, you can see what companies and organizations they chose to work and this comes from 45 international graduates. As far as Thai graduates are concerned, nearly half of the graduate's work for the public

institutions. And about 20% worked at P&O schools, which is the SSPO. And so they work now as a staff of the school that they have graduated.

On the other hand, when it comes to the international graduates, nearly 80% of them worked at P&O schools in own country. From these countries the students already come from these P&O schools of their local, mother countries. And then as they complete the program with Category I, they go back to their own countries to work, again to work at the schools where they were studying.

Now the key aspects of International Collaborative Education. See there is the WHO education standards. We are in compliance with the WHO ISPO standards and we have always been trying to be productive, in participating in ASEAN, AUN-HPN. And really probably the biggest key is to acknowledge, respect, and embrace uniqueness in different cultures and backgrounds. And I think that this has been shared by everyone at SSPO. Last but not the least, I would like to show you this video, well this video really will show you everything I was talking about.

[00:38:12] [Video showing...]
[00:38:14] This is Dr. Gary from the US.
[00:38:19] [Video showing continues...]
[00:38:44] She's Dr. Nisarat, the Director of SSPO.
[00:38:48] [Video showing continues...]
[00:39:01] This is the clinic, and this is a standard clinic. This clinic that we still use for P&O, was here 30, 40 years ago.
[00:39:28] [Video showing continues...]
[00:40:38] He is from Sudan. One of the international students. He was sent here with a subsidy from the Red Cross, and he is in the third year of the program.
[00:40:57] [Video showing continues...]
[00:40:58] He is from Senegal. He is also in the third year of the program.
[00:41:03] [Video showing continues...]
[00:41:20] This is a welcome event for the freshmen.
[00:41:25] [Video showing continues...]
[00:41:40] Well, I know I'm running out of town, so let me skip a little bit. This is a common clinic.
[00:41:47] [Video showing continues...]
[00:41:55] So again, as I mentioned earlier, the video is really all about what I was talking about. The video lasts with this, and you can always access the video in this URL.

Presentation

Strengthening Multidisciplinary Rehabilitation & Health Workforce Education in Australia

Stephanie Short
Academic Lead, Workforce Development Activities
WHO Collaborating Centre for Strengthening
Rehabilitation Capacity in Health Systems
The University of Sydney, Australia

[Biography]

1992 Doctor of Philosophy, School of Sociology, The University of New South Wales
1984 Master of Science (Economics) Sociology, with special reference to the Sociology of Medicine, University of London (Bedford College)
1983 Bachelor of Arts with Honours Class 1, School of Sociology, University of New South Wales
1977 Diploma in Physiotherapy, The University of Sydney

[Summary]

The World Health Organization (2017) report *Rehabilitation in health systems* defines multidisciplinary rehabilitation as care provided by two or more disciplines.

In 2015 the Western Pacific Region the World Health Organization conducted a survey analysis of countries in the region the about common practices in rehabilitation service delivery. The survey questions addressed multidisciplinary teamwork, assessment, goal setting, discharge planning, empowerment and training of rehabilitation users and their family members, and workplace or education setting modifications. Responses revealed a direct link to the availability of specialized rehabilitation personnel in countries with multidisciplinary teamwork models.

In 2017 *Rehabilitation and disability in the Western Pacific* reports there are very large deficiencies in both the number and specialties of rehabilitation personnel across all lower and upper middle-income countries. High-income countries such as Japan and Australia have approximately 100 times more physiotherapists per 10 000 population than some of the lower middle-income countries. While 85% of the Asian countries reported multidisciplinary teamwork, only 9% of Pacific island countries reported multidisciplinary teamwork. Moreover, no country in the region ranked rehabilitation professional as a ‘very attractive’ career. Rehabilitation is perceived to be less financially and socially attractive. This makes it particularly difficult to attract and retain competent rehabilitation professionals.

Australia has made significant progress in multidisciplinary rehabilitation service delivery and education. However, there are barriers to implementation in service delivery and education, including an insufficient number of rehabilitation professionals in certain regions and sectors. Challenges in Australia include room for improvement in the integration of disability into relevant health professional curricula and in regard to the availability of multidisciplinary rehabilitation services at community level. Plus, Australia does not have a national rehabilitation policy, strategy or plan.

Overall the WHO Western Pacific Region survey results indicate Australia is progressing towards realizing the objectives of the *Western Pacific Regional Framework on Rehabilitaion.* The WHO Collaborating Centre for Strengthening Rehabilitation in Health Systems is keen to assist Australia and other nations in the Western Pacific region to maintain this momentum.

Strengthening Multidisciplinary Rehabilitation & Health Workforce Education in Australia

Stephanie Short

Academic Lead, Workforce Development Activities WHO Collaborating Centre for Strengthening Rehabilitation Capacity in Health Systems, The University of Sydney, Australia

Thank you. Good afternoon. Firstly, I would like to thank Doctor Tobimatsu and the National Rehabilitation Center in Japan for this generous invitation to join you today. And I'm honored to be here and I hope to learn more about the National Rehabilitation Center in Japan. And I'm particularly interested in your highly technologically sophisticated work and very excited to hear about the new network that you're establishing for rehabilitation services in Japan, which is certainly consistent with the new regional framework for strengthening rehabilitation in health systems in Japan.

I also would like to convey my warm regards from my colleague Professor Gwynnyth Llewellyn at the University of Sydney. She's the Director of our WHO Collaborating Centre for Strengthening Rehabilitation Capacity in Health Systems and she's not able to be with us today. So it is her bad luck and my good luck that I'm here to talk with you today about strengthening multidisciplinary rehabilitation and health workforce in Australia.

And I'd also like to thank Darryl Barrett for the opportunity to present today and also my colleagues to hear about the developments in the World Health Organization, Western Pacific Region, and also in neighboring countries. I've been fascinated to hear about the work in Fiji and also about the internationally collaborative approach to P&O education in Thailand.

So it's my privilege to be here today partly because I've come such a long distance from Sydney to Japan, to be here today. We are enjoying summer in Sydney. And so, I'm enjoying the winter in Tokyo, and some of my Australian colleagues are probably snowboarding in Hokkaido as we speak, escaping from the Australian summer and enjoying the Japanese winter.

Well, Australia and Japan share many similarities. We are high income countries with aging populations and we enjoy the highest life expectancies in

the world. With the women's movement and increasing education of women, we have very low fertility rates and that's leading to particular challenges for meeting health workforce needs into the future.

One of our problems in Australia is the aging workforce, particularly for nurses and I understand, you have significant health workforce shortages in Japan, particularly a low supply of doctors combined with a relatively high supply of nurses. And in Australia we have particular shortages as Darryl Barrett mentioned in rural and remote areas because of the huge size of Australia's continent, we have significant problems in ena and health professionals in rural and remote areas.

So we have a reliance on overseas qualified doctors, nurses and dentists in particular. Australia is a Commonwealth country of six states and two territories. We fund Universal health coverage through the Medicare publicly funded universal health insurance system. So we generally enjoy universal access to medical and health services including rehabilitation services.

One thing I'd like to emphasize here is in terms of aging, that is for a care for people over 65 in Australia, we enjoy or we've developed an aging in place philosophy, which means we put a priority on encouraging people and enabling older people to stay in their home and providing community-based services in the home. And if the person goes into a long-term care or residential service, we try to provide low support needs in the same location as high support needs and even palliative care services. So we try to provide the continuum of strategies and services and interventions in one place as far as possible to minimize disruption for the older person.

We've talked today about the effective rehabilitation workforce which we are very aware requires input from doctors, nurses, physios, OTs, speech and language pathologists, orthotists and prosthetists. And I personally have a physiotherapy background. And the work of the WHO in the forthcoming Western Pacific Regional Framework also recognizes the wider range of health professionals who contribute to the provision of rehabilitation services and interventions including psychologists, social workers, audiologists, the work of traditional and complementary medicine practitioners, and also CBR workers.

What we know about rehabilitation and multidisciplinary rehabilitation, the provision and services are, it relies on two main foundations or platforms. One is the availability of skilled personnel as different rehabilitation disciplines

provide specific knowledge and skills and attitudes. The second foundation is that skills and attitudes are required to ensure that the range of rehabilitation needs for different domains of functioning can be met. And I suppose the third one I'd have to emphasize here after listening to the presentation from Maria is firstly, we need the skilled personnel. Secondly, we need the appropriate multidisciplinary attitudes and skills for working together in collaboration, and listening to Maria, thirdly, we need to have them employed. It's not enough to educate them, to train them or even to train them appropriately as they are clearly doing Fiji, in Thailand, and Australia, but we actually need to have the Ministry of Health on board to provide good jobs, respectable, well paid jobs to maintain an appropriate rehabilitation workforce.

Perhaps it's not necessary for me to talk to you today about the value of rehabilitation except to say that it's a very cost effective intervention in Australia. There's been a small study conducted in a hospital with daily physiotherapy care for hospitalized patients, which is resulting in a benefit to cost ratio of 2.5 where patients are leaving hospital earlier and leaving hospital in better shape than they would have otherwise.

As part of the Western Pacific region, we are interested in looking at challenges in providing rehabilitation services and also opportunities for providing multidisciplinary rehabilitation services. My colleague Darryl Barrett has already mentioned some of these, but what I want to emphasize here is the fact that multidisciplinary teamwork is far more evident in Asia where we've got 85% of countries providing multidisciplinary teamwork compared to only 9% in the Pacific. So the Pacific has a lot to learn from the Asian countries within the region.
We’re also aware of a lot more physios in the high-income countries such as Japan and Australia.
A lot more rehabilitation positions in wealthy countries, particularly Mongolia. And I have to mention there, we don't have reliable Australian data on rehabilitation physicians.

Summarizing the Western Pacific region report on the delivery of rehabilitation services, what I want to emphasize here is that responses reveal the direct link to the availability of specialized rehabilitation services in countries with multidisciplinary teamwork. And so, you have to have the appropriate health professionals employed and retained as a basis for the provision of multidisciplinary teamwork and services. One of the big challenges, and Darryl's already mentioned this in the Western Pacific report,

and it's something I'm very aware of as a physiotherapist myself, is that rehabilitation is relatively low status compared to other areas of physiotherapy or perhaps medical practice.

One obvious example was from Fiji where it's more prestigious to work with the Rugby union team than to work with someone who's had an amputation or someone who's hemiplegic because of a stroke. This shapes, people's willingness to go into physiotherapy rehabilitation or nursing or occupational therapy. It also affects the number of doctors who are able and willing to go into that area of practice. And this of course is reflected in or shaped by the relatively low financial remuneration associated with rehabilitation as a specialty.

So as a sociologist, I'm very interested in these challenges and how we can work together to improve the status and the financial remuneration associated with rehabilitation as a way of improving our ability to provide multidisciplinary rehabilitation services into the future. And I'm sure that one of the proposals in the rehabilitation framework regionally, the rehabilitation framework for the Western Pacific region, that emphasis on networking of professions and institutions and associations is very important.

So what we need for building a workforce for rehabilitation includes strengthening the training institutions. And that's why the work at Mahidol University, Fiji University, the University of Sydney, and of course the National Rehabilitation Center in Japan is so important. Of course, we need scholarships for the rehabilitation personnel. We need to employ the graduates. It's a tragedy that we can actually educate people and then, not provide well remunerated prestigious positions.

One thing I'd add here personally is that my preference as a physiotherapist was to work in rehabilitation. And I think deep down, the reason I preferred rehabilitation was because of the long-term relationships that I would have with my patients. And sometimes even with their family members. And I think the rewards and the intrinsic rewards associated with rehabilitation are very high indeed. And perhaps as part of our networking we can become better at communicating that. And I think we can communicate that better to our students and colleagues about the rewards of rehabilitation work. We also need to integrate rehabilitation better into our curricula, provide work placements and also perhaps specify rehabilitation work experience for graduates. We need to provide better incentives to retain the skilled rehabilitation professionals. And

of course the international recruitment is necessary where we haven't obtained self-sufficiency or where we haven't trained enough graduates in our own countries.

I've mentioned Australia is the six states and the two territories. This is my hometown, Sydney, the University of Sydney. This is the report from the Western Pacific region on progress in rehabilitation in Australia. What I'm going to emphasize here is not so much the successes as the challenges, and I'm going to emphasize these three challenges.

Given that we enjoy Universal health coverage in Australia, we do enjoy equitable access generally to rehabilitation services in Australia because of the Medicare national health insurance scheme, which enjoys bipartisan support from both the government and the opposition parties, the two major parties in the Australian government. But the report from the Western Pacific Regional Office of WHO has identified these three particular challenges for Australia. So even though we're a wealthy country with a very high life expectancy and Universal health coverage, we still have our own challenges.

The first challenge I want to point to is the challenge for educators such as myself, where we really have room for improvement in terms of integrating disability into the relevant health professional curricula. And that's the case for medicine as much as any other occupation. We also can boast very good access to multidisciplinary rehabilitation services for the whole population at the hospital level. But we have challenges when it comes to providing services at the community level partly because of the funding challenges associated with the state provision of community services. A lot of these services are not actually funded through the Medicare universal health coverage system. So that's the challenge we need to face.

The other challenge we have which is slightly embarrassing, is that Australia does not have a national rehabilitation policy, strategy or plan. So we enjoy very good equitable access to rehabilitation services, particularly at the hospital level, even despite the fact that we still do not have a national rehabilitation policy or strategy or plan.

This is a summary from my colleague Ian Cameron in Australia who is a rehabilitation physician. He said we still have some progress to make in terms of integrating rehabilitation into the medical curriculum. We are making small success with OT, speech pathology and physiotherapy but there's also more

room to integrate rehabilitation into the curricular of psychology, social work, and other disciplines.

Now, this is the part of my presentation that I'm particularly excited about because this is a concept and new scientific concept that came into the literature from my own research with colleagues at the University of Sydney last year. It's the concept of the 'Allied health continuum'. So I'm sure it's a new concept to you. This study was published in the journal *Health and Human Rights*, which is a journal published out of Harvard University in the United States. And it's based on a study that I conducted with an OT and other colleagues in the University of Sydney and also with a colleague who is a person with disability where we looked at the degree to which the allied health professions that we educate at the University of Sydney are committed to a human rights approach to disability consistent with the UN Convention on the Rights of Persons with Disability.

And the good news is that rehabilitation counseling and occupational therapy exhibited a very high level of commitment to a human rights approach, particularly to respect for the principles of autonomy and dignity; respect for people's right to choose how they wish to live their lives and what their priorities are. So the good news is these professions exhibited a high level of commitment to human rights and that was provided through our analysis of their curricula, their ethics documents, and also their competency standards.

The bad news is that my own profession physiotherapy did not do well in the study, nor did exercise physiology or radiography. And in fact, they exhibited less evidence of a commitment to a human rights approach. What was particularly lacking at this end of the continuum? So, we have the good news story up here and the bad news story there. What was particularly lacking here was the commitment to the principle of autonomy, respect for the right of the client or the person or the patient to make their own decisions.

And as I was trained in physiotherapy at the University of Sydney, some decades ago that really rings true for me. My very first publication was published in the International Year of Disabled Persons. And the paper was 'An holistic approach towards disabled persons and their rehabilitation'. And I have to say that we've still got some way to go in terms of respecting the rights of our clients, the people with disabilities or the patients to make their own decisions on the basis of collaboration and consultation with health professionals.

So it's my pleasure now to be working as the lead on Health Workforce Development activities in the WHO Collaborating Centre for Strengthening Rehabilitation Capacity in Health Systems at the University of Sydney with my colleague, Professor Gwynnyth Llewelyn and other colleagues, Michelle Villeneuve and Michael Millington and others. We're delighted to be in a position to work collaboratively with colleagues in Japan and in the National Rehabilitation Center and elsewhere to work towards strengthening multidisciplinary education and interprofessional practice into the future.

It's been my privilege to have this opportunity today. Arigato Gozaimashita. Thank you.

Presentation

Inter-professional Education for Undergraduate Students at International University of Health and Welfare

Masae Shiroma
Dean of the School of Health Sciences,
International University of Health and Welfare at Narita, Japan

[Biography]

Education:BA in Agriculture in 1972, Ryukyu University
MA in Speech Language and Audiology, University of Oregon
Ph.D. in Medical Sciences, The University of Tokyo

Working experience:

1986 -1996	Tokyo Medical College
1996 -2016	International University of Health and Welfare, Ohtawara, Tochigi
2016 -present	International University of Health and Welfare, Narita, Chiba

[Summary]

When working in fields of medicine, team care/team approach is essential for medical and welfare professionals to meet various needs of patients and beneficiaries.

International University of Health and Welfare（IUHW） was found in 1995 as the comprehensive university of health and welfare in Japan with a principle of "building a society with mutual respect." Under this principle, IUHW have provided students the special curriculum of Inter-Professional Education over the years at five campuses with 22 departments using WHO-ICF as a tool in order to develop a trans-disciplinary approach among other professions.

In the first year of university, students visit IUHW hospitals and other institutes in health and welfare to observe inter-professionalism in the actual work fields. In the second year, they learn the philosophy and how-tos of inter-professionalism at school. When comes to junior year, they are expected to have mastered basic skills of treatment in their own field. Small groups are formed with students from other departments, and they discuss over virtual patients assigned to them to make a care plan as a team. It is thought that students develop communication skills, problem solving skills, and clinical thinking abilities with logical and ethical mind by those repetitive discussions. In the fourth year, students undergo onsite training at IUHW university hospitals and affiliated health and welfare facilities with a team of students from different campuses, schools, and departments of IUHW.

We foster each student hoping that they can contribute to team care/team approach to provide best care for patients and beneficiaries after graduation.

Inter-professional Education for Undergraduate Students at International University of Health and Welfare

Masae Shiroma

Dean of the School of Health Sciences, International University of Health and Welfare at Narita, Japan

Good afternoon everyone. My name is Masae Shiroma from the School of Health and Sciences International University of Health and Welfare, Narita. Before starting, I would like to express my appreciation to Dr. Tobimatsu, Dr. Mori, and organizers for giving me this opportunity to introduce our IPE.

At first, please allow me to present a short movie on our IPE.

[01:04:15-01:08:47] [Video showing in Japanese language...]

IUHW, International University of Health and Welfare, was found In 1995, The founder was Dr. Fujio Ohtani, who was well known for the human right of the Leprosy, and the spirit of IUHW is, “building a society with mutual respect”. Currently, we have six campuses, 16 schools, 24 departments, all related to health and welfare including a medical school. We have 6 university affiliated hospitals and 40 other clinics, rehabilitation centers, and welfare facilities. Therefore, the environment is desirable for students to learn and practice about the inter-professional collaboration.

This IPE program has been introduced in 2010. Social background of Japan such as the advancement and segmentation of medicine or medical technologies have taken place, a super-aging society with various needs pushed the IPE/IPC since physicians alone would not be able to handle the whole situation any longer.

IPE is systematically guided; in the freshman year, each student is given to visit one of the affiliated institutes mentioned at the beginning to observe the team working carried in the institute. For sophomore, the philosophy and theories of IPC are lectured, and for Junior year, exercise on virtual patients’ problem is required in small groups, each group of 8 students consists of different department. The practicum is carried in the fourth year that only allowed to selected students for a week in a real situation in hospitals. Text

books specifically published for IPE for IUHW are used in all campus, so the students could have the same understanding to start with as they form teams for practicum from different campuses. As for the IPW in Junior for example in Ohtawara campus, about 80 groups are formed, 8-10 students and one supervising teacher in each team.

Students discuss over simulated cases provided in advance; understanding the disease, how to evaluate the symptoms, and how they should be treated. The fourth year is the practical training in a real setting as mentioned earlier.

The program for the 4th year is still on the phase of the further development through trial and error. In particular, how the outcome of the study can be evaluated, what would be the best way for the fruitful activities, what extent to supervise when the discussion is overheated among students, and so on. All of those are still under consideration.

The slide shows the philosophy of our IPW in three pillars. Frist, group dynamics among the students. They have various discussions to learn or to develop the process is very important. And also, team building is also important as they need to collaborate with students from the other departments. Students should understand their own profession as well as other professions in the team.

For building a team, Tuckman et. al, came up with this model. This might be old but still can be useful. There are different stages for the development of the team. There is a conflict taking place. However, still, many of the students appreciate this opportunity because through this experience, they learn to respect each other and gain the sense of cooperation and flexibility. Conflict itself is a part of the process for team building.

Sorry that I run through IPE in IUHW quickly. The programs need to further develop and we as teachers need to improve our skills of instructors as well as students. Introducing IPE starting from the freshman is important, and I believe that it self contributes to the establishment of a good society. Thank you very much for listening.

Presentation

Development of Human Resources for Providing Supports for Persons with Disabilities at the Collage of National Rehabilitation Center for Persons with Disabilities

Reiko Fukatsu

Director, College,
National Rehabilitation Center for Persons with Disabilities（NRCD）

[Biography]

1977 - 83	Medical Doctor Degree, Tohoku University School of Medicine (Miyagi, Japan)
1983 - 98	Department of Neurology, Tohoku University School of Medicine (Miyagi, Japan)
1998 - 99	Behavioral Neurology and Cognitive Neuroscience, Tohoku University School of Medicine (Miyagi, Japan)
1998 - 99	Baycrest Centre for Geriatric Care, Rotman Research Institute (Toronto, Canada)
1999 - 06	Director, Department of Neurology, National Hospital Organization Miyagi National Hospital (Miyagi, Japan)
2006 - Present	Clinical Professor, Behavioral Neurology and Cognitive Neuroscience, Tohoku University of School of Medicine (Miyagi, Japan)
2006 - 18	Director, Department of Clinical Research, NRCD Hospital
2008 - 17	Director, Information and Support Center for Persons with Developmental Disabilities, NRCD
2017- Present	Director, Information and Support Center for Persons with Higher Brain Dysfunction, NRCD Director, Department of Rehabilitation for Brain Functions, NRCD Research Institute
2018- Present	Director, NRCD College

[Summary]

College of NRCD has been established as a division of NRCD with a mission to train specialists who would play a leading as well as guiding role in the field of rehabilitation of persons with disabilities. To realize our objective, we offer two types of programs: a full-time educational program and short-term training program. There are six courses, which last one to three years, in our educational program to foster rehabilitation professionals: Speech-Language-Hearing Therapy, Prosthetics and Orthotics, Rehabilitation Worker for Persons with Visual Disabilities, Sign Language Interpretation, Inclusive Physical Education, and Support Worker for Children with Intellectual Disabilities. In our training program, we offer thirty-one kinds of short-term workshops, which last two to four days, and thirty-three workshops are provided yearly. Our programs

such as “Workshop for Personnel in Charge of Training Interpreter and Assistant for Persons with Visual and Hearing Disabilities”, “Workshop for Personnel in Higher Brain Dysfunction Supporting Program”, “Workshop for Medical Doctors Assessing Conformity of Hearing Aid ”, “Workshop for Occupational Therapists”, “Workshop for Trainers of Assistance Dogs for Persons with Disabilities” and “Workshop for Personnel at Support Center for Persons with Developmental Disabilities” are provided for people who support persons with disabilities in a wide range of fields such as medical care, welfare, education and others.

WHO describes disabilities in the World Report on Disability published in 2011 as follows: “Disability is part of the human condition. Almost everyone will be temporarily or permanently impaired at some point in life, and those who survive to old age will experience increasing difficulties in functioning.” What we need to identify, therefore, are the types of support to provide for difficulties in functioning that almost everyone would face and knowledge and techniques to be given to develop human resources who can provide such support. I would like to address the issue of training people to provide support for persons with difficulties not only in terms of existing professional licenses but also from these points of view.

Development of Human Resources for Providing Supports for Persons with Disabilities at the Collage of National Rehabilitation Center for Persons with Diabilities

Reiko Fukatsu

Director, College, National Rehabilitation Center for Persons with Disabilitites

Hello ladies and gentlemen, my name is Reiko Fukatsu. Mr. Barrett, Professor Waloki, Professor Short and Doctor Shiroma, and Professor Sasaki, I'd like to thank all of you for joining us today. And I am honored to be one of the speakers today.

Well, I'd like to get started. My talk is on what were trying to do to develop human resources for supporting persons with disabilities at the College of NRCD.

We are part of NRCD, and under the NRCD we have four functions. One is the Rehabilitation Services Bureau, the other is NRCD Hospital, the other is R&D Center of the NRCD, and the other is the college. We were established in NRCD to train specialist who would playing a leading as well a guiding role in the field of rehabilitation of persons with disabilities. Well originally, this college starts as a Speech-Language-Hearing Therapy Educational Training Course that was established 1971.

And then it was integrated into NRCD in 1979 and since then, our role is to provide the pioneering and latest state of the art training and education for those who are trying to support the persons with disabilities.

And well in our college, we have two pillars. One is the full-time educational program and the other is short-term training program.

And as for full-time, we have all these different courses such as Speech-Language- Hearing Therapy and the other is Prosthetics and Orthotics, the third one is the Rehabilitation Worker for Persons with Visual Disabilities, the number four is the Sign Language Interpretation.

Further we have Inclusive Physical Education Course. This is to train people, I mean educate people who are trying to become the health fitness programmers. And let me go back as for the Worker for Persons with Visual Disabilities, these can educate people to become a walking trainer for instance. Further, the last course is for Support Workers for Children with Intellectual Disabilities. So if you choose this course, you can become a child welfare officer or child care worker.

Now in addition to this full-time program, we have short-term training programs. This is another pillar and every year we conduct somewhere around 30-35 workshops a year, and which can be organized over just one day through six days sometimes.

Here we share the pioneering or path breaking new information, new technology, new technique with the participants who usually have some experience in the field already.

So our college is to try of hatch eggs. And as we have chicks, well, the other therapists or trainers to be, we then send them to the field and then after a while, we would have them, have adults, I mean some trained, some experienced chicks back to the college for more training. They can participate in short term training programs.

Now let me give you some examples, for instance we have Speech-Language- Hearing Therapist, people who try to become ST's (Speech Therapists) and they provide rehabilitation to the persons with dysarthria, stuttering, aphasia, language development disorder, speech disorder, hearing impairments, swallowing problem and a neurocognitive dysfunction and so on.
So you can imagine that a Speech Therapist has to interact with a variety of people. They can be babies, through the various of senior citizens.

So they are the ones who would provide rehabilitation to the persons with disabilities. And this is sort of common for the other students or for other people learning other courses. For instance, one person may be aiming at becoming a prosthetist or orthotist could become that occupation or if you choose, you can learn how to become a walking trainer for those with the visual disability or you can learn more about to become a health fitness programmer or you could learn to become a child welfare officer.

What happens to Sign Language Interpreter? In this case, Sign Language Interpreter does not provide rehabilitation but they would provide assistance for persons with the hearing disability. So rather they would work side by side with the persons with disabilities. Unlike the other occupations who would sort of work with persons with disabilities face to face. And the Sign Language Interpreters are there to assist, to help the hearing disabled people to communicate more smoothly. So Sign Language Interpreters may be a bit different from other professionals.

Now this is just an example. WHO issued World Report on Disability in 2011 and in that, they have this definition for disability.

Disability is a part of human condition. Almost everyone will be temporarily or permanently impaired at some point in life and those who survived to old age will experience increasing difficulties in functioning. Sorry the slide is little hard to see, sorry about it.

You may wonder what they mean about 'difficulties in functioning'. Here you can see some examples. For instance, they may find it difficult to learn and apply what they learned in practice. They may find it difficult to communicate, they may find it difficult to move and exercise, or self-caring, domestic life and occupational life can be difficult for them.

Now what is important here is to make sure that they know what they want, their own decision making. And for their decision making, they should have information, access to information guaranteed. And then once they make their decision, they have to be able to have a way to communicate that.

Otherwise although these persons with disabilities have made their decision, if they cannot let people know that, that's no good. So, for instance, we have Sign Language Interpreters and they're here to make sure that the information is accessible for the audience with hearing disability and they are here to help these hearing disabled people to communicate.

And nowadays that we're having more and more hearing-impaired people, and people with aphasia as well. So nowadays, speech therapists

are to learn more about what they can do to help those with aphasia. It is not just interpretation but this is really important to help them communicate.

So this is an example for, like a speech therapist but in other professions this is getting more increasingly important to help persons with disabilities to make their own decision. So providing aids for social communication is as crucially important as providing rehabilitation to them. This is what we actually observe recently and this is what is required of support providers.

In addition, recently we see new initiative. Recently whenever there is a new service being developed for persons with disabilities, these designers and providers are involving disabled persons more. The concept is called co-production. So, this is to encourage persons with disabilities or in needs, are now having more deeply involved in research, development, and in policy making.

Whenever they try to develop some AI or IT technology for making a very free society, they would invite persons with disabilities to hear what they really need.

And see this card? This is called Communication Board and this is used at JR, Japan Railroad Train stations, and subway stations. And recently, it was developed for non-Japanese people. But then one of the other staffs at NRCD thought that it would be useful for people with aphasia for an instance. In fact, I was one of the persons who was involved to develop this and this is just one example of this initiative. But in the future, I think there will be more and more professionals are needed and requested for interpretation of people with aphasia for instance, people with autism spectrum disorder. Those who have difficulty in communication.

And in the future, we will see more needs to train professionals who would play significant roles for citizens, policy makers service users, their families and service providers to work together, to create practical services for all. So I am really excited to see more and more professionals to be involved in this field.

Thank you all very much for your attention.

Discussion and Q&A

Yamada: Presenters, thank you very much for the great presentation. Now, based on the presentation that we've just had, we would like to start a discussion. First, I would like to set up some themes or maybe two or three topics or themes. And I would like to get a comment from everyone. So, like, three to four minutes per person or per presenter when you're making comment. As we finish a round of discussion, we would like to receive some questions from audience. So, if anyone has any questions from the floor, please ready to ask.

So as a first theme, I would like to ask is when it comes to the concept of the rehabilitation or reality of the rehabilitation, and earlier, Mr. Barrett from WHO has talked about this. Rehabilitation is a part of the Universal Health coverage. So that's the continuous care for everyone, but still, it's been seen as a special service for the people with disabilities. So, in your countries or in the different countries, what is the situation of that? And also, going forward, what do you think is the best solution toward the future for that challenge? So, if you have any challenges or the problem is in your country, what can be the solution? And what would be needed to solve that issue?

So that's the first theme that I would like you to tell us. And also, in relation to that theme, as you make a comment, multiple presenters have talked about the specialties of the rehabilitation. And also, attractiveness of the job of the rehabilitation therapist is one topic. For example, economical attractions or social attractions. And also, the excitement about the job, it's missing in the rehabilitation specialist. So that was also one problem pointed out. So, rehabilitation is something needed for everyone, but still, when it comes to the specialist for the rehabilitations, it's not always attractive as a status. So, with that situation, as we try to develop more human resources, I think it's going to be the very significant barrier.

So, what can be the solution for that to make it more attractive or to make at least the people feel it's an attractive job to become the rehabilitation specialist? That's one challenge.

For example, if you can talk about, "Here's the value that you can gain if you provide the rehabilitation services to someone else." If you can clearly explain about it, then you can clearly communicate on how attractive it is. For example, those who are severely injured or disabled, then if you do this type of rehabilitation, then you can have greater recovery in the quality of your life so that you will be able to do multiple things. And also, the presentation said that the cost effectiveness is a lot better. So, the cost can be reduced by 2.5-fold.

So that was a presentation made by the Professor Short. For example, what else can we show to demonstrate the benefit or value of doing the rehabilitation to make the job of the rehabilitation specialist more attractive or more understandable for everyone? And for that point as well, I would like to get everyone's comment.
And lastly, as you heard everyone's presentation, is there anything that you have learned or anything that you were interested in after listening to other people's presentations? I have talked several points, but you don't need to give us an answer for all the topics that I have just explained. But you can just talk about the areas that you are specifically interested in. I will give you three to four minutes for each presenter to talk or to make a comment about the things that I have just explained. So, in the order of seating here, could you please, Mr. Sasaki?

Sasaki: Thank you. That's broad explanation and a broad topic. The concept of the rehabilitation is a vital point. And at Mahidol University, I have my students, and when I try to make sure whether they are motivated or not, when the students, my student is making a presentation and then they tend to focus on only physical disability or a disease, so that's actually the area that my students tend to focus on. But instead of focusing on that, the rehabilitation should be more comprehensive. Because there is a person who is receiving the rehabilitation, and that person has a life. And in their lives, they have families and then they have jobs. And also, they may have religion, especially in Mahidol, Islam, Muslim. So, you have to be comprehensive for that.
Then if it's your family or your brothers and sisters, needs to be also kept in your mind when you see the patient. So that's how you have to develop the case study with that point in your mind. You shouldn't always pay attention too much to the physical disabilities. So that's the first point.
And can I move on to the second one? So, attractiveness of the rehabilitation specialist and how we can really communicate about the value of the specialist's job. So now, I am teaching for Master degree in the university. And then I am actually serving as an instructor for their study. And my interest of my study is affordability, which means the cost, especially in the developing countries, the materials used, and also computerized are more expensive ones. We tend to focus on such a technology, but in some institutions, something affordable or there's something which can be equivalent to such a technology should be developed. And also, immediate providing. So that's the point that I'm focusing on for my research.
So, under such circumstances, when I talk about how attractive the job can be for myself, because I have been focusing on such an area, and one day, I have

noticed one thing when I have given the assignment to my students with a point. And the students have thought about it, and then they have the different perspective for their study. And I saw that. And then I was able to see how my students were growing.
And also, when things that I have developed has been provided to patients, and then a patient was able to enjoy the outcome of having the device. And then when they have the great outcome, then that also makes me happy and that makes the patient happy. And we can share that happiness. And my students were able to share the happiness with the patients. So that's how attractive it is. And I have a lot of my patients like that. I mean, I have a lot of my students like that. So instead of me doing a lot of researches, my students are doing that a lot. And then once I teach that to my student and then my student teaches the other students, so there is that chain of the education, the passing over the things that you have learned to the younger generation. That's also another value of being the specialist. Thank you.

Yamada: About one point, about the first point they have mentioned? Maybe my explanation was not good enough. For rehabilitation. It's been seen a special service only for the people with disabilities. That's how it's been seen in many different countries or regions. So, the point that they have talked about was there are multiple people with multiple disabilities and including the family members of the patient. You have to then think the situation of the patient to provide the rehabilitation services. But in Thailand, when you talk about rehabilitations, is it being seen as a special service for the disabled people or that's also for everyone else, not only for the people with disabilities? That's the thing that I wanted to know. As Ms. Fukatsu mentioned earlier, rehabilitation is for everyone, so then, permanently or temporarily. At some point of time, rehabilitation is a service essential for everyone. But in Thailand, how the rehabilitation is being seen, especially for whom the rehabilitation exists? So, if you have any ideas about what's happening in Thailand?

Sasaki : Well, when it comes to the philosophy like that, then the earlier one, I mean, in the future, the possibility of having the rehabilitation in the future is not a shared concept at this moment, so such an education is not provided.

Yamada: I see. Then, Professor Short. In your earlier presentation. Besides my theme, as one country, like country strategy and a country plan, it's not sufficient yet in Australia, as a part of your presentation. So, you may have

some ideas about the solution, what direction going forward. Would you like to share that with us?

Short: Arigato. That's a very difficult question. I don't know. Do you have an answer for that Darryl? A very good question.

Darryl: I think one of the challenges in Australia is it is first a federal system. So, we have, in effect, six little countries wrapped up in one. As far as the health system goes, policy and service delivery and financing and standards are all done at the state level. So, the desire to do anything at the national level is just not there. However, that may change as we see aging population getting more prevalence in Australia, as we see a clearer unity around rehabilitation professionals rather than physiotherapy, all these separate groups, we're now getting a lot more unified under Rehabilitation and Allied Health. So, it may change, but I think one of the other things in Australia is because it is so heavily regulated at the state level, some may feel there is no need to have a national policy as long as we have the unity among the states.
Now, that's happening in a lot of areas in Australia. There is unity of laws, harmonization of legislation under one unified national concept. I think it may be that rehabilitation's time has not yet come. The fact that we are discussing what we are discussing today and even your first question about the concept of rehabilitation, the fact that we still have to ask that question tells me that we still have a way to go so that people understand what we're actually talking about. But that's my hunch.

Short: May Thank you. Thank you, Darryl.
And may I add one thing? My colleague, Professor James Middleton at the Royal North Shore Hospital, who's the Director of the Spinal Injury Service for Sydney and the state of New South Wales, he said to me that the major driver of positive change of reforming rehabilitation services has been the consumer health movement in Australia. So, the major impact has come from the general population, the health service users or consumers, rather than people with disabilities. And it's because, as Darryl said, people are getting older, and so they have more problems with function, more demand for rehabilitation services as they get older. People are better educated, and they're wealthier, so they're demanding more services including the full range of interventions, including rehabilitation services in line with the Right to Health and universal access to health care. So, the history in Australia suggests that the consumer's health movement will drive the demand for rehabilitation services in the future. Arigato.

Yamada: Thank you. So, Professor Waloki, what's your opinion?

Waloki: Under the concept of rehabilitation, I think coming from the understanding as a physiotherapist, with that training, also a great involvement in the area of disability through my relationship with disabled people's organizations and the training that we offer for them. However, my understanding, and I try and share this with my colleagues, is that rehabilitation is along the continuum of life. From congenital deformities through one's life, if they lose any ability to function, the physiotherapists are there, even until the old age. And increasing in Fiji now, the need for physios in the area of sports and with prevention, as well as management.

Because it's physiotherapy-focused, it's mostly with the gross motor movements. The other needs for rehabilitation for those persons needing comprehensive rehabilitation, often, it's not there because of the lack of availability of other therapists in Fiji, like speech and language therapists, occupational therapists, prosthetics and orthotics and the rest. Looking at that with disability models, so the service is very much for persons in Fiji, medical model where people identify they've got a problem trying to deal with it. If not, because there are limited resources, this is what is available. If it doesn't fit, you can't use it, then just a bit too bad. Because in terms of the completion of comprehensive rehabilitation of anyone, it requires mobility devices. Not only those, but even the basic symptoms of therapy, whether speech or physiotherapy. That's increasing, however, in Fiji, which is really good, but it's sort of not structured or coordinated.

The plastic surgeons come in and repair people. The physiotherapists need to be skilled to rehabilitate them to full functional ability again. Often, this is not an issue. Well, it is an issue because we train them and then there's no specific, keeping that person in that area to increase in their skills and their competence to be able not only to train other people but to provide the best service in that area for those people, whether they're come in with burns or others. In terms of speech, that's really nonexistent in terms of rehabilitation in that aspect.

I think it's moving in the area of mental, in psychiatry. That's an area that's improving. Otherwise, in terms of service delivery, it's very much a medical model, institution-based, but with increasing rehabilitation, community-based, but as I said already, for me, sometimes, I call it a disconnect. They're very much medical, offering basic rehabilitation, but they don't understand that rehabilitation is for the people to go back and continue on their life as functional, contributing members of their society.

And therefore, they have rights. So, in terms of whatever that was discussed here in terms of not having their rights, that's actually what happens here because of self-limited resources. These are the wheelchairs we have. Regardless of where you lived, it's something that you can use to be mobile, however limited that is, whether it's within the home. And that often is the case because often, that's where, that is one of the places it can be used. And also, lift them out. Then, they can go to the church or anywhere else. So, in terms of the rights of those who, what choice, and what they have and what they need, it's very little in terms of their choice.
So, I suppose that's what it is. That's why, as I discussed earlier, in terms of the bachelor training, we try and bring in all the competencies of the other therapists to meet so that when physiotherapists go out, they can meet the needs of those needing mobility devices and other specialty areas because they are, at the moment, the only ones that are employed by the major employer of rehabilitation workers in Fiji at the moment, the Ministry of Health. Thank you.

Yamada: Thank you very much. Professor Shiroma please.

Shiroma: The concept or definition of the rehabilitation has been changing as Dr. Tobimatsu and Mr. Barrett mentioned.,I suppose the change might be depending on the societal factors. Conventionally, it is considered that rehabilitation is for the purpose of cure. But recently, it's been changing toward care, and recently, prophylaxis or preventive medicine is another thing that included in the concept of rehabilitation. For example in Japan, PTs and OTs are actively involved in health promotion activities especially for elderlies so the injuries or the disabilities can be prevented. However like Professor Waloki mentioned, Fiji has its own situation in terms of rehabilitation.

Yamada: Thank you. Now, Dr. Fukatsu. The concept of the rehabilitation. Is it? Well, Dr. Fukatsu?

Fukatsu: Yes. The concept of rehabilitation, how the different rehabilitation is interpreted, accepted, or in order to improve the attractiveness of rehabilitation, what should we do? The concept of the rehabilitation, as being pointed out in my presentation, I think it's quite a wide scope. The medical rehabilitation that is given as a medicine or for the purpose of their life, living, the rehabilitation is given. Occupational therapy or the lifestyle trainings might be part of it. And also, getting information from the society or tell the society, the intention as communicated. All of those, I believe, they're part of the rehabilitation.

Then, do we have to make something new for the rehabilitation? It is not really so, as has been mentioned. For example, for known Japanese to whom we cannot communicate, something is developed, but that thing is used for other purposes as well. Or there's shampoo and a conditioner combination in Japan available. If you touch the lid of the shampoo with just the tactile indication , you can learn that is a shampoo, but such indication is not available with the conditioner. I've learned it for the first time. And I tried it and I learned that is a good indication for the visual impaired people.
So that might be helpful for the aged society as well. So, there might not be necessarily the clear demarcation between aging or disability. So, we can think about the rehabilitation for a wider scope.
And there are students who come to our university's exam. And then we ask their motivation to come to our university. And the first thing they point out is that they would like to be of help of the disabilities, which is really good. But as a professional of rehabilitation, what kind of professional they would like to be? That's the most important thing that I think. So, I asked that question to the students or candidate students.
So, when we get involved in rehabilitation as a professional, there has to be the attractiveness as a professional. And as long as you're the professional, then you can get the financial benefit because it is a job. That's also something we have to clear about. Thank you.

Yamada: So now, rehabilitation is not special for not only the disabled, but also, it is a service necessary to all the people. So, rehabilitation should be understood in that way. And based upon that attractiveness of the specialist in rehabilitation, economical side of attractiveness of the occupation as a rehabilitation specialist need to be improved further. In Mr. Barrett's presentation, global competency remark was pointed out. So, with that regard, would you please explain once again more specifically what kind of activity is taking place with relating to that?

Darryl: I'd like to. If you allow me, I want to talk about that concept of rehabilitation because I didn't get a chance to comment. It's really, really important because we have many countries all around the world, including in our region, that still confuse rehabilitation with disability inclusion. And they're not the same. They're related, but they're not the same. To understand what rehabilitation is, we must understand what disability is. And I could line up every single person here and get a different concept of disability because it's complex and it's evolving.

So, we have to be clear that at the moment, there's two ways to understand disability that are the overarching ways that we process disability. One is the identity. And since the UN Convention has come about, we now have the identity of disability. So that's everyone who says, "I am a person with disability. I identify. I choose to be a person with disability."
And that's great. And that's fine. And that creates a voice. And that is necessary for people to realize their rights and to be treated as equal citizens. And that's great. However, not everybody who experiences disability puts their hand up and says, "I am a person with disability." So, there is also the experience of disability. So, we have the identity and we have the experience. And it's really important that we see there's a difference between the two.
For example, in Australia, we have disability discrimination legislation. So, we have law that prevents people discriminating against persons with disabilities because of their disability. Under that law, you can bring a legal action even if you've been sick for a few days or you've missed work for a week. You can bring an action and say that's a disability action because you've been sick for three days or five days. Technically, you can do that.
Our Bureau of Statistics, our Australian Bureau of Statistics that measures and counts people with disabilities, only counts you as a person with disability if you've experienced disability for six months at least. So, there's a difference between two government agencies and how they view disability. And if we look at the Convention, the Convention even says it's a person with a long-term impairment. So, my point is that we must understand we have people that identify as being people with disability and the experience of disability. And rehabilitation is about supporting people, both, but focuses on the experience of disability.
If you injure your back and your off work for a few days, you might benefit from physiotherapy and get rehabilitation, but you're not a person with disability. Older people are the perfect example. Older people whose function starts to decline. They don't see so well. They don't hear so well. They don't move so well. They're discriminated against. They will experience many factors of having disability, but they will rarely ever put their hand up and say, "I'm a person with disability." They'll just say, "I'm getting older." So, we need countries like Japan to help us help this conversation progress and know that rehabilitation is for the entire population. It's not about people with disability.
I'm going to stop there because I could keep going and going, but I really just wanted to emphasize that very, very important concept that we are trying to get across. So, Mr. Yamada, could you please repeat the question. I got...

Yamada: What's happening in WHO?

Darryl: Okay. Thank you. So, yes. So, what we're doing in WHO, I guess to look at competencies, we need to go back just one step and look at rehabilitation interventions.

So, the rehabilitation interventions work that we're doing in WHO, it's being led from the headquarters. And I think now we have identified 21 health conditions. So, 21 health conditions, a range of health conditions such as hip replacement or stroke or cerebral palsy. Twenty-one health conditions we've drawn out from the burden of disease. And we are looking at what types of rehabilitation are needed as a minimum or as a priority to support people's health and well-being. So, we're looking at what types of rehabilitation are needed by somebody with a particular health condition to support their return to function. So, for all of those health conditions, we're putting out whether somebody needs balance training or whether somebody needs orientation in the community or if somebody needs muscle strengthening for transfers. Different types of interventions. What types of things. We're not looking at what services are needed. So, we're not looking at, "Does this person need physiotherapy, or this person need speech therapy?" We're coming one layer under, if you like, and looking at the types of interventions, the types of actions.

So, as we develop that, all those different interventions that we need to do to help people return to function, we then need to develop the competencies or the types of skills that a health worker will need to have to be able to deliver those interventions. So, we've got all the interventions for the different 21 health conditions right now. We have all the different types of therapeutic interventions. And then for the competencies, we need to develop a list of skills that a health worker needs to have to deliver those interventions.

So, this is all kind of happening at the same time. And we have different people. Like, one of Stephanie's students, Jody, is supporting the competency framework development. And so, she's looking at all across professions, across different countries, across different health workforces to see what types of competency frameworks already exist to see what sort of global picture we can create. And then by 2020, so it will go through various processes. It will go through technical reviews. It will go through various consultations so that by 2020, we will have a global framework based on these interventions for these health conditions. We can then work directly with countries, like in Fiji, to look at how they might develop their training or their human resource processes to fit the competencies, to get the competencies they need to deliver the interventions for the health conditions that have been identified. So, I hope that gives a really broad snapshot of what we're looking at.

Yamada: Thank you. Now, here I'd like to take any questions from the floor. So, anybody who has questions or comments, raise your hands please.

Nakamura: My name is Nakamura, working at NCRD. I would like to ask you a question about education, I mean, training people. Well, today we had many people who are teachers, who were professors and doctors. Based on my experience, I would say there is always a limit. See, including myself, we would try to learn as much possible in the school, but once we start working in the field, then there is so much that we never imagined. Oftentimes, we do learn from our senior colleagues. I would say if there is an opportunity for us to come back to school for refreshed learning and for learning more, and then ideally, we can step up ourselves. Our skills will be improved, but in reality, it can be really difficult. I mean, we have to work so hard every day on a daily basis and there is no time for us to review what I did. There is no time for us to re-learn some things. It's a dilemma. We hope to be better, but it can be very difficult. What can we do?

Yamada: Who would you like to ask this question to?

Nakamura: Okay, maybe I can ask for some help from Dr. Sasaki and somebody from Australia.

Sasaki: So, you were talking about the limit for learning to all in the academic?

Nakamura: Yeah. Well, what I'm trying to say is that while in the field, I mean, we always feel that, "I should have learned this more. I should have been trained more." But whenever that happens, of course, I mean, in Japan, we can go to a conference society. If we want to, we can go ask some doctors for advice, but it doesn't happen that often. I mean, it can be difficult. But in Thailand, what happens?

Sasaki: Well, there are Thai domestic associations and we would go to their domestic Thai associations related with rehabilitation in order to get information like "ASEAN University Network". There is ISPO, a global educator's meeting. I mean, we would attend such events and conferences And, this is not only to get information, but also this is only also good for gaining insight and knowledge from colleagues.

Nakamura: Would you be able to find any other different occupations or other jobs?

Sasaki: Well, Mahidol University is not that good at that yet. This year, we finally started multidisciplinary approach. I remember that I was talking that there is a faculty for Traditional Thai medicine. And well this year, we had a joint session having people from SSPO, which is my section, and people from the Traditional Thai Medicine section. For instance, what can we do in order to minimize or alleviate spasticity? Sometimes we can learn from what other section can say, share. Thai Traditional Medicine people, they can give us some quite interesting helpful information and that was quite eye-opening. And so, that kind of joint multidisciplinary or a multi-functional, cross-functional learning is good.

Nakamura: What about in Australia? What happens in Australia?

Stephanie: Thank you for your question and for time to think about answering your difficult question. The first thing I would say is that change comes from the employer. It comes from the employing organization. We have a positive change in New South Wales now, because it comes from the Ministry of Health. The Ministry of Health is supporting health professionals to be involved with teaching students, and involved in professional development, and also involved in research. So, the direction is coming from the Ministry of Health for the employees in the Ministry of Health and we have a population in New South Wales of about six million people, and the health professionals are stimulated by teaching our students from the University of Sydney. They find that stimulating and they are getting up to date through teaching. They're also encouraged with workshops and conferences, and the time and the money to support their professional development.

And then thirdly, for those who are interested, they are encouraged to enrol in research degrees, maybe a master's degree or a PhD if they have the energy, and the time, and the motivation to engage in research. And I have to say, it's only happening maybe in the last five years in Allied Health. Medicine has always been ahead of the Allied Health professionals in terms of their engagement with teaching, professional development, and research. And the change is coming from the Ministry of Health through the Division of Allied Health to the workplace, to support the health professionals. And then as an academic, as a professor, we're very happy to work with the health professionals. But I would say the change had to come from the employer to

give the health professionals the time and the resources to engage in teaching and professional development, and possibly research.

Nakamura: Thank you. Well, the reason I did not ask about Fiji is because I am pretty knowledgeable about Fiji. In fact, I have a friend of mine who is working as a P&O in Fiji. He tells me so much about what is happening in Fiji. What is really nice is that we now have internet via which we can communicate. It can be e-learning or something digital. If there are more and more learning opportunities for people like me, it would be great. For instance, if WHO can provide us with the education or training tools like e-learning or something like that, that would be great. I also thought that in Thailand, you have there the distance learning and that is great. I am very impressed with that. Thank you very much.

Yamada: Anybody else from the floor? So, since there are no more questions, but any presenters on the stage? Any other comments?

Waloki: Maybe I'd just go back to another of your first points that brought up for the discussion in terms of attractiveness of rehabilitation workers. It is not attractive for numeration or any others. In Fiji, a lot of students come into the program, particularly the boys, also the girls, because they want to go into sports physiotherapy. It's very visible and attractive. And you, of course, I mean, you're working with attractive young men and women who are well. That's a given. Anyway, it attracts them into the program to come in and be trained. In terms for employment for them to go out, that's even limited, because that's mostly in the area of rugby, netball, and soccer. Athletics, not really. The bodies can employ physiotherapist with those skills for their team, but certainly, it's not attractive moneywise. But they come in more for the image of participating and supporting events which is international. So, they get to see the world being a physiotherapist, training teams. Maybe just a comment on the training as a worker out there.

In terms of the Fiji National University, when basic training is in context, they go out into community rehab, the specialist areas in the community. Not only that, in the hospitals around Suva, around the nation, but also in their home countries, we send them back there in terms of context training. However, it never really prepares them because the training's different from the actual reality of practice in terms of what's available, and that's been on the service providers, and most of the time, this is the Ministry of Health in terms of rehabilitation and delimitation in terms of budget and then the provision of the resources that they give in terms of that.

We are having an issue with this because we're wanting to scale up physiotherapist in assessing and managing those with speech and those who had recovery following the repair of cleft lip and palates, and tendon injuries and such. That's fine. And also in the skills and competency to prescribe appropriate wheelchairs for people. That's fine, but do they do that in the service? A lot of the times, it's minimum because the service doesn't do that. I've mentioned in my presentation of the diabetic hubs where persons with diabetes go to for special care whether they have in any stage of their having diabetes. But there is no therapist in those particular areas, so we trained them using P&O specialists in the competency of uploading DCC, Digital Content Casting, DCC, and RRD, rigid dressing. So, we scale them up. Then when they go out, it really doesn't happen in terms of context, and we do this.
I can understand your issues with that. But also, in terms of formal education, we do not provide it yet, though. I hope when we go back, we will be able. We got a post-graduate diploma in rehabilitation in physiotherapy and rehabilitation at the university that we hope to get it through the university committees so that it's offered to those who are in service by 2020, early next year or second semester this year. I think even though Japan and other places you are, but it seems like we're facing similar issues in terms of this issue. Anyway, thank you.

Yamada: Thank you.In this discussion, rehabilitation specialist attractiveness, how we can make it more attractive is the point that we have just discussed. And for that of course, the country budget or government budget is always tight in all the countries and the budget is always limited. But as we provide rehabilitations in all kinds of disabilities, it can be mitigated to what they want. And also, the people will be able to do something that they couldn't do before. And also, because this is very cost-effective intervention, so if you can provide that rehabilitation in an effective and appropriate way, then the cost can be reduced for the entire society. So, that's something that all the people involved in rehabilitation like us has to keep communicating to the entire society. Then, the priorities of our initiative can be heightened in the government policies in the future. Any other comments or any other questions from the floor and from the stage? We actually are behind the schedule, I mean, about ten minutes, but now we would like to conclude the discussion, or last comment from Mr. Barrett.

Darryl: I'm at that. It's a very exciting time for Japan right now, because you may or may not be aware that you now have a Japanese Regional Director for WHO in the Western Pacific, Dr. Takeshi Kasai, who is a very strong supporter

of rehabilitation. And he has put the issue of aging populations and non-communicable diseases really high up on the priority list, and he also recognizes that we need to support countries so that they can have populations that are healthy as they age whether or not they have a non-communicable disease. So, you have a very strong Japanese representation at the regional level in WHO. So, I'll be watching Japan to see how the leadership and rehabilitation transpires. Thank you.

Yamada: Thank you. So, this concludes discussion. Thank you very much. Thank you. Please go back to your seat.
Now, lastly from the NRCD, from the Rehabilitation Services Bureau. We would like to have a closing comment by Mr. Mori.

Closing Remarks

Koichi Mori

Director of Rehabilitation Services Bureau,
National Rehabilitation Center for Persons with Disabilities

Thank you very much for attending the WHO Western Pacific Region's International Seminar today. As mentioned in the opening keynote speech by Mr. Barrett, the WHO re-defined "rehabilitation" in 2017 as "interventions for optimal functioning and reducing disabilities given the health condisions and the environment of individuals."

The "health conditions" refer to those in which various activities and participation are ristricted due to illness, impairment, disability, or surgical and other treatment. The corresponding rehabilitation include medical and occupational rehabilitation, as well as educational and social rehabilitation, though the latter two types were not mentioned in the presentation. Those categories of rehabilitation require respective specialized interventions. In developed countries, the required sepcialization is realized by various specialists with respective qualifications. However, the mention of the environment where individuals are in is to ask for the rehabilitation that is practically and reasonably possible given the social, political and economical context of the country where they live.

In the keynote speech, he explains how the WHO is promoting rehabilitation globally with "the Rehabilitation 2030 initiative," in which 10 priority areas for action were identified to strengthen health systems to provide rehabilitation.

The sixth of these action areas is “Developing a strong multidisciplinary rehabilitation workforce that is suitable for country context, and promoting rehabilitation concepts across all health workforce education,” which is the theme of this seminar. The WHO conducts research on the current status in each country, and provides normative guidance and technical support. Especially in the western

Pacific region, The majority of the countries there have very few rehabilitation specialists, and the governmental policy support lags severely behind. In many countries, there are too few professions that enable effective multidisciplinary collaboration. In some countries there is no training system for rehabilitation specialists.

There is also a good news that physiotherapists are ubiquitous. In Fiji, as Dr. Waloki reported in the second lecture, there is a system to train physiotherapists. In some contries, however, physiotherapists, or whoever in charge of rehabilitation, are required to go beyond their specialized fields, because there are few other rehabilitation professions.

As was revealed in the last discussion, the occupational physiotherapy is so popular as to atract many students. However, some of them may face unusal difficulties after getting a job. In Tonga, there are only two physiotherapists in total. During the soccer season, one of them would be left in the hospital alone if the other accompanied the soccer team.

Healthcare standards are improving in all Western Pacific countries. As a result, the population is aging and the need for rehabilitation is increasing due to the aging of society. However, research results have shown that rehabilitation has not kept up with medical progress.

The WHO proposes a rehabilitation framework to solve this, proposes the concept of rehabilitation as a set of interventions, and is working on strategic plans at various levels. The issues include how to implement the proposals in health policy, how to train professionals, and what the minimal requirements should be for those professionals in each country.

The requirements can be summarized in a word "competency," which is rather unfamiliar in Japanese. But competency represents the comprehensive ability to employ various skills that are required in rehabilitation. Competency have a common element across disciplines, which is to collaborate with other professionals of different disciplines. In order to foster interprofessional work,

interprofessional education is important during training.

The second report by Dr. Waloki from Fiji emphasized that for the proper provision of rehabilitation, the relevant professions should be respected and the place to work should be provided in the society, besides the education system.

The third lecture by Professor Sasaki of Mahidol University in Thailand was about training professionals in prosthetics and orthotics. Although Thailand is not strictly among the 27 countries in the WHO's Western Pacific region, Mahidol University accepts students from many countries in Africa and Europe as well as in the Western Pacific region, to be educated before returning to their countries of origin. The proportion of the foreign students was reported to be slightly over 10% of all students. Their education fulfills the Category 1 of the education standards defined by the International Society for Prosthetics and Orthotics (ISPO). The adobtion of such internationally recognazed standards for the professional education would be very much appreciated by the countries that do not have enough resources for educating rehabilitation professions on their own.

The fourth lecture given by Professor Short of the University of Sydney introduced the main points of the WHO report on the Western Pacific region and the current status of advanced interprofessional collaboration and clinical education in Australia.

In Australia, many professions are involved in achieving effective rehabilitation. We were surprised by the cost reduction of as much as 25% by performing patient-centered rehabilitation, which reduced hospital stay periods. Although the involvement of multiple professions in rehabilitation is similar to the current situation in Japan, Australia's federal system lets each state enact its own regulations, without unifying leadership of the federal government. It is the current issue that face the country, as mentioned in the last discussion session.

As is mentioned in the Convention on the Rights of Persons with Disabilities of the United Nations, she underscored the importance of respecting human rights and securing the right of self-determination in rehabilitation. Since it is

questioned if the human rights of those with disabilities are always fully respected by the rehabilitation professionals, there should be provision of human rights education even after becoming a professional regardless of profession.

The fifth lecture by Professor Shiroma, Dean of the Faculty of Narita Health Sciences, International University of Health and Welfare, introduced their interprofessional education program that has been implemented since 2010 in the training of rehabilitation professionals in Japan. This is a trailbrazing program in Japan. Other universities have followed the trail. She told us that in her University as many as 1,500 students each year learn interprofessional collaboration starting from lectures to practices and to clinical training. After such systematic teaching for undergraduates, they would surely become much better in collaborating with other professionals in clinical situations after graduation. Although interprofessional education may be most needed in medical schools because medical doctors often have to and/or want to manage other medical professionals, there is not much of it in the education of physicians for now, at least in Japan. Therefore, it is easily foreseeable that interprofessional frictions are not rare.

In the last lecture, Dr. Fukatsu, dean of the Colledge of our National Rehabilitation Center, introduced our Colledge for both qualifying education and after-qualification clinical training for support and rehabilitation professionals for persons with disabilities. It has been pointed out that not only interprofessional cooperation but also participation of all the concerned parties in the development of rehabilitation is imperative for the the betterment of social participation and QOL of the persons with disabilities. This view has become important in the education of rehabilitation professions, as "no decision without us (persons with disabilities)" has been advocated in recent years.

The most important take-home message of this seminar is that the WHO is promoting the Rehabilitation 2030 initiative. This seminar focused on the sixth action area, "Developing a strong multidisciplinary rehabilitation workforce that is suitable for country context, and promoting rehabilitation concepts across all health workforce education." The current status related to interprofessional education and work in the Western Pacific region were reported, and how to

improve it in the future is duscussed. I believe that we have shared a fairly clear image of how to go about in the 6th action area of the Rehabilitation 2030 initiative.

I would like to express our sincere thanks to the speakers who gave us valuable lectures today. Thank you very much for all the participants as well. As the members of the hosting National Rehabilitation Center for Persons with Disabilities, we would be extremely happy if this seminar gave you a lead to think and act on how to promote rehabilitation in the Western Pacific region or in the entire world from now on.

As a collaborating facility of the WHO, the National Rehabilitation Center for the Persons with Disabilities holds an international seminar on rehabilitation every year. We look forward to your continued participation. Thank you.

This will end my closing remark.