



Organized by WHO Kobe Centre in cooperation with WHO Kobe Centre Cooperating Committee

WKC Forum: Innovation for Ageing Populations – Addressing the challenges of frailty and disability –

24 June 2014

Programme

14:00–14:10	Opening remarks	WHO Kobe Centre
14:10–15:20	Presentations	
	“Overview about innovative assistive technology for ageing populations: Addressing frailty and disability”	Mr Chapal Khasnabis Technical Officer Disability and Rehabilitation Violence and Injury Prevention and Disability World Health Organization (WHO)
	“Prosthetic walking for older lower limb Amputees”	Dr Takaaki Chin President, International Society for Prosthetics and Orthotics (ISPO), Japan Director, Hyogo Institute of Assistive Technology Director, Robotic Rehabilitation Center, Hyogo Rehabilitation Center Hyogo, Japan
	“A short history of prosthetics and orthotics education in Japan: Lessons gained from organizing community based rehabilitation services”	Dr Seishi Sawamura Principal and Honorary Director Hyogo Rehabilitation Center Hyogo, Japan
	“Experience of prosthetics and orthotics education in Japan: Introduction of technical aids education and its background”	Mr Toshifumi Komine Prosthetics and Orthotics Course Director Kumamoto College of Medical Care and Rehabilitation Kumamoto, Japan
15:20–15:55	Discussion	<i>Moderator:</i> Dr Takaaki Chin
15:55–16:00	Closing remarks	WHO Kobe Centre

Background:

By 2020, the world population is projected to reach 7.7 billion. Out of this, those 65 years old and above will reach 1 billion, outnumbering the number of children less than 5 years of age which will only be 650 million. In short, the world's demography is unprecedentedly changing. It is definitely and rapidly ageing. At this WKC Forum, a WHO expert and three Japanese experts (disability; assistive technology; community-based rehabilitation; and prosthetics and orthotics education), will present their respective framework, evidence-based body of work and strategic recommendations in moving forward on addressing current and emerging frailty and disability in ageing populations through innovations in assistive technology.

Speakers: Short bio sketch

(in order of the programme)



Mr Chapal Khasnabis

Technical Officer
Disability and Rehabilitation
Department of Violence and Injury Prevention and Disability
WHO Headquarters

Mr Khasnabis completed Prosthetics and Orthotics Engineering from All India Institute of Physical Medicine and Rehabilitation, Mumbai, India and then obtained a Master degree in the Rehabilitation Science from Strathclyde University, UK. Mr Khasnabis has worked 14 years with Ministry of Health and Ministry of Social Welfare (Government of India), 9 years with Mobility India, a Nongovernmental organization (NGO), which he founded in 1994 and then in the World Health Organization, since last 12 years. His responsibilities include promotion of Assistive Technology (AT) and Community-based Rehabilitation (CBR). Mr Khasnabis is the key architect and chief editor of the CBR Guidelines, which is a joint publication of WHO, ILO, UNESCO and IDDC, in which he introduced a new concept of Community-based Inclusive Development (CBID), which is now in practice in more than 100 low- and mid-income countries. He is also the editor of the WHO Wheelchair Guidelines, Wheelchair Service Training Packages, Technical Guide on CBR and Leprosy, and Joint position paper on the provision of mobility devices in less resourced settings.

“Gradual functional decline is simply an unavoidable and integral part of the ageing process, whether one has a disease or not. Ageing, frailty, disability, and loneliness are synonyms. However, some of these can be prevented, curtailed, delayed, or even corrected with the use of Assistive Technology (AT) such as walker, wheelchairs, prostheses, hearing aids, low vision aids, devices for activities of daily living and activities of daily living or mobile applications. AT sector needs to change accordingly and put more focus on AT for ageing population and address their need; frailty, disability, and loneliness in particular – beyond business as usual.”



Dr Takaaki Chin

President, International Society for Prosthetics and Orthotics (ISPO), Japan
Director, Hyogo Institute of Assistive Technology
Director, Robotic Rehabilitation Center, Hyogo Rehabilitation Center
Hyogo, Japan

Dr Chin graduated from Tokushima University (Faculty of Medicine) in 1986. In 1992, he received his Ph.D from Kobe University Graduate School of Medicine (1992), and joined the Hyogo Rehabilitation Centre. At the Centre, he assumed the position of Head Physician of the Dept. of Orthopaedic Surgery as well as the Dept. of Rehabilitation Medicine (2006-present); he was also assigned as Director of the Robotic Rehabilitation Centre in 2011. With his expertise in applied approaches to rehabilitation medicine using robotic technology, which brings significant benefits to disabled people, Dr Chin has contributed particularly in the development and widespread use of the myoelectric hand. Since April 2014, with his new post as Director of the Hyogo Institute of Assistive Technology, Dr Chin is leading the Institute's activities, including as 'Research development in assistive technology and rehabilitation support'. He holds positions such as Councillor of the Japanese Society of Prosthetics and Orthotics, Representative of the Japanese Association of Rehabilitation Medicine, etc. He has published many journal articles and publications in rehabilitation of amputees, spinal cord injury patients; prosthetics; clinical application of robotic technology, etc.

“In step with the aging of the population, the major cause of lower limb amputation is due to diseases such as arteriosclerosis and diabetes. As a result, there is a higher proportion of older people who are lower limb amputees. The prosthetic rehabilitation process is very difficult for older people, while it may have fewer problems in younger people. The success rate of older patient's prosthetic rehabilitation therefore stays rather low. The approach by a team of highly-professional staff is a key to success.”



Dr Seishi Sawamura

Principal and Honorary Director
Hyogo Rehabilitation Center
Hyogo, Japan

After graduating from Kobe University and becoming an Orthopaedic resident in 1955, Dr Sawamura took prosthetic training course at UCLA. Dr Sawamura started rehabilitation service for amputees by establishing a mobile counselling unit of Hyogo Consultation Center for People with Disabilities; and learned their actual needs. He greatly contributed to the establishment of the Hyogo Comprehensive Rehabilitation Center in 1969, and assumed the post of Director in 1992. He is committed to the formation of the Hyogo Prefecture Rehabilitation Council (1973), where he is currently the Chairman. Dr Sawamura served as President of the International Society for Prosthetics and Orthotics (ISPO) from 1995–1998. He has been the Principal of the Kobe College of Medical Welfare since 2003. He has published and lectured widely in his expertise and research areas, including orthopaedics, prosthetics, community-based rehabilitation (CBR), health and welfare for people with disabilities, etc. Dr Sawamura has focused his life's work on CBR to enhance the quality of life of people with disabilities, staying in their familiar environments with dignity.

“My father was a user of a below-knee prosthesis and at the same time he was a prosthetist. This is the reason that I became an orthopaedic specialist. Around the year 1955, Japan had almost no education system for prosthetics and orthotics; and no cooperation was developed among the relevant sectors. The Research Group of Prosthetics and Orthotics was launched in Kobe in 1968, and it was the predecessor of the current Japanese Society of Prosthetics and Orthotics. The Japan Association of Rehabilitation Hospitals and Institution, which was established in 1990, is pursuing a course toward the community-based rehabilitation (CBR) focusing on providing necessary support for the elderly, people with disabilities, and their families. Our final goal will be Inclusive Society.”



Mr Toshifumi Komine

Prosthetics and Orthotics Course Director
Kumamoto College of Medical Care and Rehabilitation
Kumamoto, Japan

Mr Komine graduated with a degree in Industrial Chemistry from National Kurume Technical College in 1982; a Prosthetics and Orthotics (P&O) Course at College of National Rehabilitation for the Person with Disabilities in 1985; and the Department of Social Welfare at Bukkyo University in 1994. He had his first clinical training at Leimkuhler Inc. in the USA, and at corresponding facilities in Japan. He was recognized as a certified Prosthetist in the USA and received a national license as a Japanese Prosthetist and Orthotist in 1988. He has spent more than 20 years in P&O education after his educational activity began at the College of National Rehabilitation Center. Since then, he has held the position as a chairman of Japanese P&O Educator's Committee (2001-2007), a member of Japanese P&O Examination Committee (2004-2007), and a member of the Law of Japanese P&O Revision Examination Committee (2004). His clinical experiences were undertaken in the fields of Recovery Rehabilitation, Orthopaedics, Prosthetics among others. He is currently not only teaching P&O, but also, he works on the fitting required between human and technical aids.

“Prosthetists and orthotists are co-medical staff and perform unique occupation. They design, fabricate and fit the special appliances such as artificial limbs and braces to people who suffer from illness or motor function impairment. It is well known that Long-Term Care Services have long been operationalized in Japan. Accordingly, various types of technical aids such as wheel chairs, canes and others are recognized as useful tools and equipment for elderly people who have motor impairment, and these are provided by law to those who need them. But, do they fit properly? Since prosthetists and orthotists can contribute in adapting technical aids, prosthetics and orthotics education has been included in the curriculum at the colleges. Some clinical cases will be shown to discuss prosthetics and orthotics education.”