

Professor Sihui Wang Symposium

What is the recent development in vision rehabilitation services in Asia?

Chair: Dr Allen MY Cheong

Co-chair: Dr Jianmin Hu

Dr Allen MY Cheong is an Associate Professor from School of Optometry, The Hong Kong Polytechnic University, Hong Kong. Allen's research interests are focused on the psychophysical, behavioral, and clinical aspects of ageing and low vision research with specialization in two activities – reading and mobility. Her major research goals are: 1) to improve the understanding of the impact of visual ageing and impairment on the performance of real-world visual tasks; 2) to apply research findings in clinical management for geriatric and visually impaired patients; and 3) to set up cost-effective rehabilitation models to improve the visual function of the low vision population. Allen has been on the organizing committees of The Hong Kong Optometric Conference since 2010. In 2014, Allen was one of the members of the International Scientific Committee for Vision 2014 as well.

Dr. Jianmin Hu, Chief Physician, Associate Professor and master's tutor from Second Affiliated Hospital of Fujian Medical University, is currently an executive committee member of International Society of Low Vision Rehabilitation Research (ISLRR), who also served on numerous local and national Ophthalmology, allied health and research committees. He is a member of Optometry Group in the Chinese Academy of Ophthalmology and the American Academy of Ophthalmology, an advisor on the committee of the Chinese National Association of the Blind for Research in Retinal Degeneration. Due to his expertise and contribution in the area of the low vision studies, Dr. Hu has become a vital expert consultant of China Assistive Devices and Technology Center for Persons with Disabilities (CADTC) as well as a visual impairment rehabilitation consultant of the Ministry of Education of the People's Republic of China. He has participated in a variety of ophthalmology and low vision related health and research committees. He formulated the national plan on low vision rehabilitation and the educational rehabilitation curriculum standards for visually impaired persons in China.

Symposium abstract

This symposium is named after Prof Sihui Wang who had made remarkable contributions to the area of vision rehabilitation development in mainland China. She established the first children's low vision clinic in Tianjin Eye Hospital, China in 1987. The aim of this symposium

is to highlight the recent development of vision rehabilitation services or models in Asian countries. In this symposium, we have invited 6 international speakers from China, Hong Kong, Japan and Malaysia to present the recent development of vision rehabilitation service in their regions.

Individual presentations:

- Prof. Xudong Yu, Eye Hospital of Wenzhou Medical University
Yu Xudong, Chen Jie , Deng Ruzhi , Lv Fan – “The establishment and development of low vision center of the Eye Hospital affiliated to Wenzhou Medical University”
- Prof. Zhao Jun, Shen Zhen Eye Hospital
Jun Zhao, Hongwei Deng, Ping Liang, Liang Chen, Bingzhi Yang, Xianming Fan – “Low vision rehabilitation in Shenzhen, China”
- Dr Xiaomeng Shen, School of Special Education, South China Normal University
– “The development of education for the Visually Impaired in China”
- Mr Tadaaki Tannabe, Nippon Lighthouse, Welfare Center for the Blind
– “Vision rehabilitation in Japan”
- Dr Rokiah Omar, University Community Transformation Centre, Universiti Kebangsaan Malaysia
– “Low Vision Rehabilitation: Latest development in Malaysia”
- Prof George Woo, School of Optometry, The Hong Kong Polytechnic University
– “Future development of vision rehabilitation - A multidisciplinary approach towards vision rehabilitation”

1. The development of education for the Visually Impaired in China

Chen Xiaomeng

School of Special Education, South China Normal University, Guangzhou China

Background: Education of the visually impaired is an important part of special education in China. The first blind school established in Beijing in 1874 by British missionary (William Hill Moon) has been developed for more than 100 years. Due to the uneven development of economy, culture and education, the development of education of visually impaired is also very uneven. The blind schools in the first-tier international metropolis are striving for the internationalization of the education of the visually impaired. There are many schools with serious shortage of funding for running schools, insufficient numbers of teachers and equipment, and inadequate understanding of the local government and education.

Content: This paper introduces the educational subjects, training targets, educational placements, organization of the school system, curriculum and teaching, vocational education and participation in international projects. In addition, the paper introduces the development trend of education of the visually impaired in China, which includes more complex subjects, integration of placement forms, advanced assistive technology, and new roles of blind school.

Implications: Through this presentation, we hope more people understand China's education for the visually impaired. By then, we can strive to seek more international cooperative research with other countries.

Key words Education of the visually impaired, Blind, Development trend

2. The establishment and development of low vision center of the Eye Hospital affiliated to Wenzhou Medical University

Yu Xudong, Chen Jie , Deng Ruzhi , Lv Fan

The Eye Hospital of Wenzhou Medical University, Wenzhou, China

Abstract: The Center of Excellence in Low Vision and Vision Rehabilitation of the Eye Hospital of Wenzhou Medical University aims to become a visual rehabilitation demonstration base of China. The cooperation with SUNY Optometry and Lavelle Found make us have an international platform and vision. We have a complete set of low vision rehabilitation facilities and team, a workable standardization of diagnosis and treatment of low vision rehabilitation, and a perfectly matched electronic medical record. Based on the reality of Wenzhou, we have established several sustainable visual rehabilitation programs, covering patients in the hospital, blind schools and communities. However, we notice that low vision rehabilitation services and resources are far not enough, comparing to the huge visual impairment population. This raises the importance of low vision rehabilitation publicity. We believe that things will be better if we all work together step by step, although it is very difficult. The improvement of quality of life among blind school children is a good example which gives us much confidence. We also know that the government and different kinds of social resources have given us great supports which makes our remarkable achievements come true. In the future, we will go on focusing on the top level of low vision rehabilitation

around the world, and provide more excellent low vision services to communities and rural areas in Zhejiang province and other cities.

3. Low vision rehabilitation in Shenzhen, China

Jun Zhao, Hongwei Deng, Ping Liang, Liang Chen, Bingzhi Yang, Xianming Fan
Shenzhen Eye Hospital (affiliated to Jinan University), Shenzhen, China

Abstract: Our low vision rehabilitation clinic was established in Shenzhen Eye Hospital around 2003, with the help from our hospital and Shenzhen Health Authority Government. Since then, our clinic expanded continuously in these years. We serve about 200 cases of low vision patients per year within our clinic and arrange different public health education events. Our team does not only include ophthalmologist and optometrist, but also psychologist and special rehabilitation therapist in the ophthalmic field to help and serve our patients well.

There are a variety of different low vision rehabilitation models in different areas of China. Our hospital, Shenzhen Eye Hospital, is the second largest public specialized ophthalmic hospital in Guangdong province, China. We set up the low vision clinical system which suits for our hospital's and Shenzhen's condition, which attracts many patients around Shenzhen area. We gradually improve the low vision rehabilitation evaluation and training system in order to establish and advance the Shenzhen characterized system constantly.

In recent years, we obtain social supports not only from Shenzhen Government, but also from the non-governmental organization, such as Shenzhen Lions Clubs. We also benefit a lot from the other hospital specialist such as Dr Jianmin Hu, who has helped us set up our own low vision rehabilitation clinic and provide consultation for our patients. We will manage more special consultation doctor from aboard in the future, such as Dr Eli Peli from Harvard University who will visit our clinic on Oct 26 2017 to give a great talk and discuss our work. We warmly welcome experts from all over the world to visit our low vision clinic and give us your helpful advice.

4. Low Vision Rehabilitation: Latest development in Malaysia

Dr Rokiah Omar^{1,2}

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The management of patients with low vision (LV) requires the consideration of a variety of different aspect in order to ensure effective assessment, treatment and rehabilitation. Various aspects need to be considered in assessment, treatment and rehabilitation of LV patients for more effective management. This paper describes the origins of low vision services in Malaysia and the current availability of public, private and NGO services. This paper describes the latest model of low vision rehabilitation in Malaysia that incorporates not just LV care but encompasses mental health and quality of life assessments intended to improve the long-term management of low vision patients.

5. Vision rehabilitation in Japan

Mr Tadaaki Tanabe

Nippon Lighthouse, Welfare Center for the Blind, Japan

Vision rehabilitation is not commonly used word in Japan yet. Vision rehabilitation can serve visually impaired patients in four different areas including vocation, education, welfare and low vision care in hospital.

- a) Vocational trainings compose of acupuncture, massage, and computer training, which are served in national rehabilitation centers and other facilities owned by private sector. Massage is long served by visually impaired people which is protected by the government. However, sighted people who do not have a license of massage invade the area these days.
- b) 2. Compulsory and vocational special educations are served to the visually impaired students permitted by the school with free of charge. Compulsory educations are served as segregated or integrated elementary and junior high school. Vocational education serves acupuncture and massage trainings, similar to the vocational training served in national rehabilitation centers. Since schools for special education are located in every

prefectural capital city all over Japan, most people living in Japan can have a chance to get it.

- c) Service in welfare area is offered to only certified visually impaired people. It contains social adjustment trainings such as orientation and mobility training, braille and activities of daily living. Those trainings are supplied by the facilities managed by the government or private sectors which are subsidized by the government.
- d) Low vision care in hospital is conducted in low vision clinic by ophthalmologists and orthoptists. Low vision clinics supply low vision care which does not include orientation and mobility training, supported by health care insurance. However not so many hospitals can afford it now. The latest hot medical news is the implantation of induced pluripotent stem cell (iPS) to the retina for recovering visual acuity in RIKEN center for developmental biology. The new era of vision rehabilitation might begin in the near future.

6. A multidisciplinary approach towards vision rehabilitation

Prof George C. Woo, OD PhD

School of Optometry, The Hong Kong Polytechnic University, Hong Kong

Low vision care involves vision rehabilitation by a team of health care professionals. They include primary care family physicians, ophthalmologists, optometrists, occupational therapists, social workers, psychologists, teachers, mobility instructors and others.

The role of each of these professionals will be described briefly in this presentation. The process begins with the eye examination and ends with a number of treatment options based on the outcome of a comprehensive low vision assessment. Follow up visits are important as they ensure compliance of the recommendations provided for the low vision patient and possible changes in the ocular disorder.