

East Asia Vision Program - Vietnam Case Study One

Five perspectives on the development of Optometry Training in Vietnam

Program component: Workforce development

Type of case study: Optometry development

Implementing agency: Brien Holden Vision Institute

On 29 September 2014, the first optometry course in Vietnam was launched at the Pham Ngoc Thach Medical University (PNTU) by the Australian Consul General, Mr John McAnulty in the presence of Professor Nguyen Thi Ngoc Dung, Rector of the PNTU; Associate Professor Tran Anh Tuan, Director of the Ho Chi Minh City Eye Hospital (HCMEH) and Professor Brien Holden. This auspicious event was attended by national and international guests, optometry students and their parents.



Photo 1: Launch of the first optometry course in Vietnam at the PNTU, Ho Chi Minh City

Participants in the optometry training course recently spoke with BHVI staff about their experiences of the course and their passion for reducing vision impairment and avoidable blindness in Vietnam.

Perspective one: Ms To Nhi

Ms To Nhi from Ho Chi Minh City was diagnosed with myopia in the fifth grade, and went on to develop an interest in eye health and vision care. When Ms To Nhi attended an information day about the new course in October 2014, she realised that optometry was the right choice for her.

Ms To Nhi said the first students in the course can be seen as pioneers in the optometry field in Vietnam, and that they should “help other people, especially the next generation of students, know and choose optometry as their long-term career.”

Ms To Nhi intends to open a small refraction clinic to provide free eye care services to poor and disadvantaged people including children.



Photo 2: To Nhi and Prof Brien Holden at the launch of the optometry course in PNTU

Perspective 2: Mr Long

The new optometry course draws upon existing optometry expertise in Vietnam to lead the new generation of optometrists. The Head of the newly formed Optometry Sub-Department at the PTNU, in charge of managing and delivering the optometry course, is Mr Long, one of the three optometrists in Vietnam.

Mr Long is glad that the new role provides the chance to develop an independent optometry department, saying that “with help from BHVI and lessons learnt from other countries, we hope we can get on the right track to develop optometry as a new profession in Vietnam.”



Photo 3: Mr Long (middle) presenting at the 5th ASEAN Optometry Conference on the development of optometry in Vietnam.

Perspective 3: Ms Minh Anh, Optometrist

A key activity funded by the East Asia Vision Program is strengthening the training capacity of the teachers in the new optometry course. As part of this capacity building, in 2014 Mr Long and optometrist Ms Minh Anh completed a Paediatric Refraction Placement Program in Melbourne, delivered by BHVI. Mr Long said that this program provided the knowledge and equipment needed for him to start examining paediatric patients who have strabismus, amblyopia and binocular vision problems, and expressed an interest in pursuing PhD studies to further enhance his role as a university lecturer.

Ms Minh Anh works at the Vietnam National Institute of Ophthalmology (VNIO) where her main role is to develop the newly established contact lens clinic. Ms Minh Anh lectures in the VNIO refraction courses and also teaches 5th year medical students and 4th year bachelor of nursing students at Hanoi Medical University (HMU).



Photo 4: Minh Anh (middle) with Australian paediatric optometry specialists and fellow trainees from Cambodia at the EAVP Paediatric Placement Program in Melbourne.

Following the paediatric program, Ms Minh Anh and Mr Long successfully delivered a two day EyeTeach training workshop to 20 refraction trainers in November 2014. Ms Minh Anh told BHVI staff that the training workshop helped to shape her own teaching methods for the optometry course, and that she learnt a lot from the team work and the participants.

Ms Minh Anh commenced a Masters of Clinical Optometry program at the University of Melbourne in March 2014. Ms Minh Anh plans to become a specialist optometrist at the hospital, running a contact lens clinic alongside ophthalmologists, and also to supervise undergraduate students at the university clinics.

Perspective 4: Ms Duyen

The preparation of the optometry course has also involved senior optometry figures in Vietnam such as Ms Duyen, an experienced optometrist who was involved in developing a refraction training course which has been delivered to over one thousand refractionists. Although Ms Duyen retired from HCMCEH in 2014, she remains a key stakeholder and is involved in the development of optometry education by working as a reviewer and editor for the optometry education materials translated into Vietnamese. Ms Duyen notes the development of the optometry course as “a milestone in the development of refractive error history for Vietnam.”



Photo 5: Ms Duyen with Minh Anh at the optometry course launch in PNTU

“I am still learning from the work of translating the Vietnamese optometry training materials, which I am doing with Dr Duc Anh from Vietnam National Institute of Ophthalmology in Hanoi. This work helps me to review and learn new knowledge on optometry and prepare myself to be able to teach students in the future,” Ms Duyen shared about her current experience editing twenty three optometry modules which will be taught in Vietnamese.

Ms Duyen is excited at the new challenge of teaching optometry at university level, saying that she will access online resources from BHVI and participate in training workshops to enhance her teaching capacity.

Perspective 5: Dr Yen and Ly

Over the past years, BHVI has been working in partnership with the HCMCEH, where Dr Yen is Vice Director. According to Dr Yen, the recruits for the first optometry course are all outstanding students with English proficiency which will allow easier learning from international guest lectures conducted in English.

Dr Yen emphasised the importance of collaboration, recognising it as a good opportunity for shared learning with international optometrists, and noting the value of partnering with the HCMCEH to ensure students can build on theoretical learning with practical application.

Using this collaborative approach, BHVI Country Representative Ms Ly has been working closely with national partners including PNTU and HCMCEH in the south, and VNIO and HMU in the north to establish optometry education in Vietnam. Working together enabled them to overcome significant implementation challenges for the optometry course, and in September 2014, the Minister of Education and Training (MOET) granted approval for the first bachelor degree course in optometry to commence in the 2014-2015 academic year at PNTU. A month later, approval was granted for HMU to start an optometry course. Ms Ly described her relief upon receiving approval for the course, and said she'd like to thank the Australian Government for their generous support as without this, we would never have an optometry course in Vietnam.



Photo 6: Ms Ly, Prof Brien Holden and PNTU Vice Rector Dr Dieu talking to the inaugural optometry students at the launch of the optometry course in PNTU.

East Asia Vision Program - Vietnam Case Study Two

Ms Tran Thuy Anh - Trainee Refractionist

Program component: Workforce development

Implementing agency: Brien Holden Vision Institute

Since joining the Vietnam National Institute of Ophthalmology (VNIO) in 2010 as an eye nurse, Ms Thuy Anh has worked at the Paediatric Ophthalmology Department. Ms Thuy Anh attended a three month refraction training course conducted at VNIO in 2013, and in 2014 she participated in a refraction skills monitoring and mentoring program conducted by VNIO refraction trainers. This program involved performance assessments for trainees in the six to 12 months following their refraction training, and also provided mentoring to ensure ongoing use of the new skills. The mentoring report showed that Ms Thuy Anh's overall performance was very good and she was able to perform refractions skillfully and without supervision.



Photo 1: Thuy Anh examining a 4 year old child with refractive error in the Paediatric Department

Ms Thuy Anh explained her thoughts about working as a refractionist at VNIO's busy Paediatric Ophthalmology Department. "In our department, there are 11 refractionists trained through similar courses. We are lucky to have that many, since working with children is not always easy," said Ms Thuy Anh. The 11 staff rotate their duties in the department so that each of them can work as a refractionist for a week every month. "This helps us have the chance to work with patients all the time, so that we will not forget our skills gained from the refraction course," said Ms Thuy Anh.

The department sees more patients in the summer months, seeing over 60 children a day compared to 30 children each day in winter. This is because during the summer vacation, parents have time to take their children to have their eyes checked.

Working with large numbers of children can be challenging for Ms Thuy Anh. She explains that the course provided all general skills needed by refractionists. However, working with children is different as they are not always cooperative. This means we need continuing education which enables us to better work with children.

As part of the EyeTeach Training in 2014, the refraction trainers from both the VNIO and Ho Chi Minh City Eye Hospital were provided with upskilling in paediatric refraction, delivered by two Vietnamese optometrists who attended a two-week intensive paediatric placement program in Australia, supported by the Australian Government East Asia Vision Program. In due course, they will be able to share these skills with the refraction trainees.

A number of children with low vision, examined by Ms Thuy Anh, were referred to the low

vision clinic at the VNIO. Now Ms Thuy Anh she looks forward to participating in a low vision training course in the near future.

Ms Thuy Anh has expressed her appreciation for what she has learnt from the refraction course, saying that prior to the course she thought she had enough training as an eye nurse to help with refractions for children: “The course proved I was mistaken and that there was quite a lot to learn. I might have missed out on referring patients that needed it due to my lack of knowledge in some of the practices or skipped techniques. In the past two years, I feel confident that I have carried out more accurate refractions and made more referrals for the children who have come to me.”

The refraction course has strengthened Ms Thuy Anh’s desire to learn new skills for her professional development. Ms Thuy Anh told us, “The course not only provided me with clinical skills but also showed me that I should never stop learning new things. I have heard about optometry education commencing at the Hanoi Medical University in 2015, and I long to undertake this study, as that’s what our patients really need.”

East Asia Vision Program - Vietnam Case Study Three

Mrs Le Thi Luu - Patient

Program component: Service delivery

Implementing agency: CBM Australia

Mrs Le Thi Luu is a farmer from Thinh Thanh commune, Yen Thanh district, Nghe An Province. Mrs Luu's commune is 20 km from the district hospital and 80 km from Vinh city. Her family is on the list of poor households in the commune, and her husband works to provide for their small family in addition to taking care of her. Their family income is generated from growing rice and a small banana plantation which earns them around one million Vietnamese Dong (approximately AUD\$75) per year. The Luu household still contains basic necessities and has a bicycle and an old television, as it did in 2013.



Photo 1: Mrs Le Thi Luu in her home in Vietnam

In 2009 Mrs Luu's health deteriorated when she was diagnosed with arthritis and Buerger's Disease. Side effects from Mrs Luu's treatment led to cataracts developing in both eyes. When the East Asia Vision Program ran an outreach activity for eye screening in poor areas, Mrs Luu was identified as a candidate for cataract surgery. Support was provided by health insurance (95 per cent) and Nghe An Eye Hospital (five per cent) to cover the full cost of Mrs Luu having cataract surgery on her right eye.

After the cataract operation, Mrs Luu's eye continues to be in good condition with vision of 2/10. Every month she has a health follow-up check at the commune health station for her Buerger's disease as well as her vision.

Mrs Luu is more mobile and independent after the cataract surgery, as she can now see well enough to ride a bicycle again. Mrs Luu is able to ride to the commune health station one kilometre from home to attend treatment and follow up appointments. The increased independence given by her restored vision means Mrs Luu is able to participate in the life of her community and to spend more time helping her husband. The rice and banana plantations which supply the family's domestic needs also enable the purchase of medication for Mrs Luu each month.

Mrs Luu said that local community groups such as the Women's Union provide frequent visits and care to encourage her and her husband. Her husband also appreciates the visits and phone calls from Dr Dzung from Nghe An Eye hospital to ask about her condition. Improved vision has significantly improved life for Mrs Luu.

Mrs Luu still remembers the day when she had her cataract operation. She was so happy that she could see. Her husband, who was always beside her, said just one simple word about the surgery: "Wonderful!"

East Asia Vision Program - Vietnam Case Study Four

Dr Nguyen Ngan Ha - Researcher

Program component: Workforce development
Implementing agency: Brien Holden Vision Institute

Dr Ngan Ha graduated as a Doctor of Medicine from Hanoi Medical University in 2012. After completing her bachelor's degree, Dr Ngan Ha commenced further education in the field of ophthalmology and has been enrolled in a distance learning Masters of International Ophthalmology degree at the University of Sydney. She joined the Vietnam National Institute of Ophthalmology (VNIO) as a resident in September 2012.



Photo 2: Dr Ngan Ha (5th from left - front row) at the closing of 8th refraction course at VNIO.



Photo 1: Dr Ngan Ha (second from left) at VNIO Emergency Unit

Dr Ngan Ha will complete her master's degree in 2015, and she hopes that she will have more opportunities to do research and to participate in research workshops like the one organised recently by the Brien Holden Vision Institute (BHVI) in June 2014.

"This workshop helped me improve my knowledge and skills in research methodology and design as well as prepare research protocols. This will be very useful when I conduct research studies in the future," Dr Ngan Ha said. She also expects to have opportunities to go abroad to gain more experience at different research and education institutions, adding, "That will help me contribute greatly to the development of ophthalmology in Vietnam."

Dr Ngan Ha's research project, *The assessment of glaucoma services at the big eye care centres in the North of Vietnam*, was one of three research projects selected to be funded under the East Asia Vision Program. This research project was assessed by the VNIO, BHVI and Centre for Eye Research Australia (CERA) to be useful for understanding and improving glaucoma care services in northern Vietnam.

Talking about the research Dr Ngan Ha said, "Glaucoma remains the second common cause of blindness and the foremost cause of irreversible blindness worldwide and in Vietnam. The disease is starting earlier and progressing faster in this population. Glaucoma cannot currently be prevented, but if diagnosed and treated early it can usually be controlled. Very little information is available on current glaucoma services and management protocols in the north of Vietnam. This study will provide baseline data, and identify deficiencies in the eye services.

The aims of this study will be to assess the services available for glaucoma management in the North of Vietnam including the eye care staff, the number of instruments and glaucoma management. This will hopefully be used in future planning and service improvements.”

Dr Ngan Ha will implement the research project within a thirteen month timeframe, from December 2014 until December 2015. BHVI is providing a research mentor from Australia to assist with the design, implementation, analysis and write up of the project, while Dr Ngan Ha will be responsible for finding a research supervisor in Vietnam to monitor the progress of the project and to provide in-country support. It is anticipated that the Australian mentor and Dr Ngan Ha will work together on this project about one hour per month. By the end of the year, the study results will have been analysed and written up into a paper for submission to a scientific journal. The final results of the research will also have been presented at the Vietnam National Ophthalmological Society Conference.

Dr Ngan Ha is confident about the success of the project. “It is a cross-sectional study, so it has several advantages, such as ease of data gathering and assessment and low cost. Data will be collected from three main hospitals. The more hospitals that participate in this research, the more valuable the data is,” she said.

Although this will only be the second research study Dr Ngan Ha has undertaken (the first one conducted as part of her Bachelor degree at HNU) she has shown great interest and strong determination in doing research.

“Research allows me to pursue my interests, to learn something new, to hone my problem-solving skills and to challenge myself in new ways,” Dr Ngan Ha said. She revealed that along with the abovementioned research project, she will conduct another research study on *Retinoblastoma in Vietnam: An epidemiological and clinical study* as part of her master’s degree final thesis next year.

East Asia Vision Program - Vietnam Case Study Five

La Ha Anh - Patient

Program component: Service delivery
Implementing agency: CBM Australia

La Ha Anh is in grade five at a secondary school in Hanoi. Ha Anh has low vision and often needs more time during class to complete school work and activities.



Photo 2: Ha Anh reading with a friend at school



Photo 1: Ha Anh is learning with Hoang Anh, a friend with low vision in her class

When Ha Anh was born with cataracts, her parents were quick to respond and she received surgery and had an artificial lens placed at two months of age. The surgery was performed by Dr Nguyen Thu Hien, a Low Vision Doctor at the Vietnam National Institute of Ophthalmology (VNIO). After the operation, Ha Anh's vision loss was still considered severe to profound and she was prescribed +8D glasses to make the most of her limited vision.

At the beginning of the 2014 school year, Ha Anh had a follow up appointment with the doctor at the VNIO Low Vision Rehabilitation Centre and was prescribed with distance spectacles that she feels are comfortable and convenient to use. Ha Anh explained that she is able to look at the blackboard a lot more easily with spectacles, and doesn't have to ask her friends to read the information.

Ha Anh also finds it easier to read and write when using reading glasses. Her vision with both eyes is 3/40 and is greatly improved 3/16 with spectacles, -4.00D on both eyes.

Ha Anh talked about her understanding of the challenges of living with low vision and some of the strategies she uses. "I have to look longer, slower than the others. I try to focus more attention to listen to lectures. I have blurred vision for distance tasks. Sometimes I have to go closely to have better vision. I do not write as fast as the others but I tried to write more concise and short", she explained. She also said she had benefited from school vision stimulation lessons and had gained strategies such as making the most of her hearing and how to judge from the details and colours. She explained that, "at home, I need more light at the table, kitchen and toilet. When travelling at night, I always hold a torch ... these are some experiences I want to share with the other friends with low vision".

Ha Anh explained that she was sometimes upset by people's comments about her eyes but she tried to overcome it and she enjoyed school. She explained that, "I like studying Vietnamese and English. Now I also can see comedy shows, animation in iPad, and a mobile phone proficiently. The learning journey ahead is long, and I wish to achieve as a good and obedient student".

Ha Anh said she was a lucky child to be treated early, cared for and trained properly by her family members, doctors and teachers. She is very satisfied with her current vision; "I am treated equally in learning and playing. I feel myself now not become a burden of my family. My parents are a lot happier when I express my best effort in learning and living, not much different from other peers".

Ha Anh's teacher was also excited and proud of Ha Anh's progress; particularly that she reads and writes print, can read exercises on blackboard and can follow activities taking place in the classroom.

Hoang Anh, another vision impaired student in Ha Anh's class, enjoys playing and sitting at the same table with Ha Anh. The teachers let Ha Anh and Hoang Anh sit at the front tables. Hoang Anh does not see letters on blackboard because of his very poor vision but Ha Anh is keen to assist him as she understands his difficulties, and can help him better than other friends in the class.

Ha Anh's mother said all family members felt sad and disappointed when they first knew of her cataracts. After several surgeries, lens placement, follow-up medical care and appropriate education, Ha Anh is developing well and keeping up with her peers and this reassures her family. Ha Anh's parents are very excited about her progress, and say they are less worried about her future.