Industry News

The Establishment of Optometry in Vietnam: A Short History

Robert E. Molter, Jr., OD, FAAO, Hai Le Thanh, MSc

The first Vietnamese optometry class matriculated in 2014. Almost a decade later, Vietnamese optometry continues to progress with increasing numbers of optometrists being educated in two university programs. The profession is also making gains, albeit slowly, in being recognized and accepted within the Vietnamese private and public health systems. This article strives to give the reader a brief history of the efforts to introduce optometry to Vietnam, the reasons for bringing optometry to Vietnam, and the challenges yet faced by the profession there.

Background

Vietnam, a country in Southeast Asia, has a population that will reach 105 million by the end of 2024. Historically reliant on agriculture, Vietnam's economy has diversified and grown rapidly in past several decades with manufacturing, IT and tourism becoming significant sectors.[1] The move away from an agrarian society has accelerated the development of myopia and other eye care challenges in Vietnam. Myopia has been a particular problem in this region of the globe.

History and need for optometry

The Vietnamese healthcare system prior to the introduction of optometry included opticians, refractionists and ophthalmologists. Due to the shortage of ophthalmologists, coupled with the lack of ability for eye health diagnosis by opticians and refractionists, eye diseases such as glaucoma, diabetic retinopathy and other treatable or preventable eye disease often advance to severe stages before being detected. Access is often difficult for those in rural areas as most eye care is concentrated in urban centers. Additionally, routine eye health exams are not a common practice in this culture.[2]

Establishment of optometry programs

The need for optometry was recognized by the Vietnamese government several years prior to the start of formal training in 2014. With the assistance from several international non-governmental organizations (NGOs), agreements were struck and steps taken to begin two schools of optometry: the first in Ho Chi Minh City, in the southern part of Vietnam, and the second in the capital Hanoi in northern Vietnam. The curriculum for the optometry programs came primarily through the efforts of the Brien Holden Foundation (BHF) which coordinated the collaboration of many internationally recognized optometric educators. The curriculum is freely available online in several different languages, including Vietnamese at the Brien Holden Foundation website.[3] In addition, BHF has supported staff in Vietnam to work closely with the universities. The in-country staff has included an administrator to liaison with all stakeholders, as well as foreign optometrists who have served as educational consultants, didactic lecturers and clinical instructors. Stakeholder meetings continue to be held at least once every semester to discuss progress

and impediments from the various perspectives of all involved.

Optometry begins in Vietnam

The year 2018 marked the true beginning of optometry in Vietnam with the graduation of the first 13 Vietnamese-educated, bachelor-level optometrists from the Medical University, Pham Ngoc Thach (UPNT) in Ho Chi Minh City. Hanoi Medical University (HMU) followed in 2019 with 43 graduates.

The first graduates were assigned to several public eye hospitals, but the department administrators had no official guidance about what the new graduates were capable of doing or how to utilize them. Many were simply put to work as refractionists. Then, on November 1, 2021, with support and encouragement of many stakeholders and several key educators, the Ministry of Health (MoH) put into effect a job code which outlined the duties of optometrists for the public hospitals. This represented the first codification of optometry as a profession in Vietnam. The job code includes many elements of the World Council of Optometry (WCO) definition of a Level 3 optometrist. Level 3 of the WCO includes: optical technology services, visual function services and ocular diagnosis services.[4] It excludes ocular therapeutics; however, a recently passed optometry practice law may open the door to therapeutics.

Several top optometry graduates, primarily from UPNT but also from HMU, have been employed as representatives by the major international ophthalmic industry leaders including Johnson & Johnson, Essilor, Zeiss, Rodenstock, as well as local rigid gas permeable (RGP) and orthokeratology labs. The technical education and English language skill of the optometrists lends itself well to these positions. Several of the teaching staff have also served important roles as interpreters and translators with the latest Orbis missions to Vietnam.

Educational self-sufficiency

Select early graduates were also offered university teaching positions. The optometry schools were designed to become self-sustaining with the graduates taking over full teaching duties as they gained experience and higher degrees. However, the plan encountered a problem as a masters-level optometry degree, a degree still unavailable in Vietnam, is required to teach in a bachelor-level program. Efforts to develop a Vietnamese master's program in optometry are underway and paperwork has been submitted, but approval is still pending. NGOs have sponsored, and some of the graduates have self-funded, study abroad to obtain masters-level degrees in optometry. There are now several Vietnamese graduates who have also begun PhD programs which, when repatriated, will boost the ability of the Vietnamese programs to grow, flourish and to be led by optometrists.

Early growth of the profession

Optometry Vietnam, as a section of the ophthalmological association, was officially recognized by the governing powers as a group in 2023. This recognition potentially allows the beginning of a formal optometric association. Organized optometry will be needed to advocate for the new profession as well as to develop relationships with the thought leaders in government and industry. These relationships will further serve to solidify optometry's place in the healthcare system. Both university programs have extracurricular optometry clubs and the HMU club recently affiliated with VOSH/International as a student chapter, furthering international cooperation and involvement. The first optometry-led educational conference was in 2022, hosted by UPNT and well-attended primarily by local eye care professionals of all levels. In December 2023, an educational conference was held in Hanoi with notable international speakers, again the topic concentration was myopia control with hundreds of attendees coming from all parts of the country. Also, several young Vietnamese optometry teachers and graduates have presented lectures and posters at several international conventions, with some of the posters and

presentations winning awards for excellence. Optometry in Vietnam, even at this early stage, is showing great promise.

Additional schools required

The HMU program enrolls as many as 80 students each year; the UPNT program now enrolls close to 40. Doing the math illustrates the need for additional optometry programs to be formed in Vietnamese universities. Using American ratios, Vietnam currently needs over 13,000 optometrists to cover its current population.[5] By the time the new optometrists begin to retire, the country's need for optometrists will only be fractionally met by the two existing programs. Although there are now about 400 optometrists in Vietnam, where 5 years ago there were only a handful, the challenge of the future remains.

The decision of other universities to begin optometry programs will be driven in the future both by public health policy and economics. As optometry is more widely accepted and the benefits of routine care recognized by the public, economic drivers will increase the interest of students to study optometry. Private optometric practice will provide the graduate with greater income potential than the public hospital setting. To be more effective, current and future optometry programs should be designed or upgraded to provide a masters-level optometry degree as the default degree, and in time move to the OD degree. If we assume an average class size of 50, the math suggests that there will need to be as many as 10 optometry programs to meet the needs of the Vietnamese population. Even if ten schools were created now, it would still be 25 years until workforce needs could be met.

Challenges

Workforce aside, optometry as a profession has several other challenges in Vietnam. The challenge of creating a positive public perception of what optometrists provide faces each new graduate and hopefully will be accepted by these young optometrists as an opportunity for educating their patients. The new optometrist's training has included the ability to perform comprehensive dilated eye exams as well as diagnosing disease and they are encouraged to practice to the highest level of their ability throughout their education. However, many employed optometrists are not supplied with the proper equipment to provide comprehensive exams. Slit lamps and tonometers, let alone binocular indirect ophthalmoscopes, are rarely available. The cost of this equipment is too great for the graduates to supply themselves.

Cultural challenges also exist in Vietnam from the standpoint that the culture is very respectful of age and position within an organization. The young optometrists are not comfortable with speaking up and pushing to practice to the full extent of their education. Culturally speaking, it is better to conform, respect the older workers and stay quiet.

Language is another potential challenge. Linguistic imperialism concerns aside, currently most optometric educational and scientific literature is published in English. Continuing professional development requires reading optometric journals which convey the latest findings in vision science. Although English is mandatorily taught in all Vietnamese schools and most Vietnamese university students have the basics, lack of practice erodes proficiency. Because of the foreign lecturers, the students at UPNT were exposed to English over the 4 years of their education. Most of these students gain a tremendous amount of conversational and scientific English skill simply because of exposure to spoken English daily. One challenge will be that this English proficiency will be lost in the future as native speakers take over those classes at UPNT. At HMU, the use of English in the classroom has not been common. Rather, the foreign educators there have either acted as coordinators of the class information to be presented or have had direct translators present in the classroom, which has proven to be inefficient. Going forward there will be a challenge to have the latest optometric information translated and relayed to the Vietnamese optometric community. This represents an opportunity for those fluent in English who can translate and disseminate the information necessary for the Vietnamese optometric

profession to remain current.

Lastly, the challenge of licensing and scope of practice lies ahead. At the end of December of 2023, Vietnam's MoH listed optometry for the first time in the laws regulating the practice of medical technicians. The licensing and practice rules specifically listed three levels of optometry, the lowest being a certificate-level optometrist which would have a 2-3 year education. The second is the bachelor-level optometrist with at least 4 years of training, and the third level is categorized as a specialist of optometry most likely for those with a masters-level optometry education. The two existing optometry programs currently provide for a bachelor-level degree and thus are the second tier as described in this law, and there is no guidance as to the scope of practice of the optometrists other than what the public hospital job code describes for the bachelor-level optometrists. This may be an opportunity for the higher-tier optometrists, those with masters-level therapeutic training, to truly help their ophthalmology colleagues by handling many of the medical non-surgical cases if a job code can be developed with those specifications.

The practice rules handed down by the MoH at the end of 2023 have no testing requirement for licensure other that the successful graduation from the university program, although it stipulates that an optometrist must practice with a licensed optometrist or ophthalmologist for 6 months before obtaining his or her own license. There are also no required continuing education hours for the optometrist to maintain their license. These issues will need to be addressed in the future as new knowledge, techniques and technologies are adopted by the optometric profession to ensure Vietnamese optometrists remain current.

Summary

Ten years on, Vietnamese optometry has progressed from 13 timid first-year students and only a handful of foreign trained optometrists, to a self-reliant system of educating future eye care specialists. While more schools will be required to meet workforce goals in the future, the core practice of optometry has been codified within the private and public health systems, and the graduates are training to provide comprehensive visual and eye health evaluations. We must be reminded that even in the US it has taken over a century to develop our own optometric profession to the level we all now enjoy. Still, evidence reveals the seeds of global cooperation are bearing fruit regarding the early formation of the optometric profession in Vietnam, all with the goal of meeting the domestic eye care needs of the country.

Acknowledgements

The authors wish to thank the following individuals for their assistance:

Kimberly S. Molter, OD

Howard McAlister, OD, MPH, FAAO, Dipl. AAO, FVI

Jeffrey L. Weaver, OD, MS, FAAO, Dipl. AAO, FVI

Suit Ho, PhD, BScOptom, GCert, IntDev

Minh Anh Tran, MCIOptom, FBCLA, FIACLE

Hoai Long Tran, MScOptom

References

1. The World Factbook [Internet]. Washington, DC: Central Intelligence Agency; c1997 [cited 2024 January 24]. Available from: https://www.cia.gov/the-world-factbook/countries/vietnam/
2. Molter RE, Weaver JL, McAlister WH. Utilization Survey of the First Two Cohorts of the Optometry Graduates from the University of Medicine Pham Ngoc Thach in Ho Chi Minh City, Vietnam. Optom Educ. 2021, 46(3):26-30.
3. Global Optometry Resources [Internet]. Sydney, Australia: Brien Holden Foundation [cited 2024 January 24]. Available from: https://brienholdenfoundation.org/international-program/learning-resources/global-optometry-resources/
4. A Global Competency-Based Model of Scope of Practice in Optometry [Internet]. St. Louis, MO: World Council of Optometry; 2015. Available from: https://worldcouncilofoptometry.info/wp-content/uploads/2017/03/wco_global_compentency_model_2015_2015.pdf

Robert E. Molter, Jr., OD, FAAO is a professor at the UPNT optometry program in Ho Chi Minh City, since 2016 and an Adjunct Clinical Professor at the Michigan College of Optometry since 2015.

Hai Le Thanh, MSc., graduated from the UPNT program in 2018 and has taught there since 2019. He finished his MSc at Cardiff University in the UK in 2022, along with professional certifications in glaucoma, medical retina and pediatric eye care.