Ophthalmology elective in China

BY GRACE LOY





andering through the bustling streets of Zhejiang, China, immersed in the harmonious blend of modernity and tradition, I made my way to the Eye Centre of the Second Affiliated Hospital, Zhejiang University College of Medicine. The aroma of traditional Chinese breakfasts – soymilk and bao buns – greeted me as I arrived. Spanning eight floors and over 10,000 square metres, this specialised ophthalmology hospital, with its state-of-the-art clinical and research facilities, provided the ideal setting for my elective.

The hospital lobby was reminiscent of a luxurious hotel reception, with polished marble floors, soaring ceilings, and walls adorned with golden-framed portraits of renowned ophthalmologists. But unlike a hotel, this space was busy with patients, who had already gathered despite clinics starting only after 9am. As I joined the crowd and made my way to the escalators leading up to the clinic, I noticed patients already queuing for appointments or lining up at various nursing stations for routine checks – blood pressure, visual acuity, and eye pressure tests – procedures I would soon learn were routine for most adults.

My assigned ophthalmology trainee mentor greeted me warmly, pleased that I could communicate in Mandarin, which made our discussions about clinical presentations and workflow much smoother. We quickly immersed ourselves in the day's activities as 60 patients were scheduled for the morning clinic alone. The clinical experience at Zhejiang University Eye Centre stood in stark contrast to my

previous rotations in the UK, where I had mostly observed specialised, consultant-led clinics. Here, the high patient-turnover rate and diverse presentations offered more hands-on opportunities. I found myself using the slit-lamp more frequently and encountering a wider variety of conditions daily, ranging from blepharitis and dry eye syndrome to glaucoma and age-related macular degeneration.

One of the most striking aspects of the clinic was its efficiency. The patient management system prioritised rapid, accurate assessments rather than extensive consultations. Patients were seen quickly and sent off to collect medications or to other floors for further investigations, with instructions to return later. I found this pace invigorating and learned to make quick clinical decisions, honing my ability to differentiate between conditions. This experience gave me a deeper appreciation for an emergency department-like approach to ophthalmic care, where speed and efficiency are paramount, but thoroughness is still maintained. It was an eye-opening change of pace, and I thoroughly enjoyed the challenge. The exposure to such a diverse array of conditions also highlighted how much I still had to learn in managing ophthalmic pathologies and adapting to high-pressure environments.

Comparative view of healthcare systems: China and UK

During my week at Zhejiang University Second Hospital, the contrasts between China's healthcare system and that of the UK became increasingly apparent, influencing both my clinical experience and understanding of patient care.

China's healthcare system differs significantly from the UK's NHS, especially in terms of structure, funding, and patient access. The NHS is publicly funded through taxation, while China operates a hybrid system, providing near-universal coverage through public medical insurance, supplemented by out-of-pocket payments for certain services [1,2]. In China, most employees are enrolled in an employmentbased insurance programme funded by payroll taxes shared between employers and employees. For the unemployed or rural residents, government-financed medical insurance is available [2]. However, despite the broad coverage, patients still face substantial out-of-pocket expenses, particularly for consultations, surgeries, and advanced treatments. This creates a twotier system in which wealthier individuals can access quicker, higher-quality care, while those with fewer financial resources may face delays or limitations in treatment.

China's healthcare system is also shaped by its overwhelming patient volume. With a population density approximately four times that of the UK [3], Chinese hospitals often manage up to three times the patient load of their UK counterparts [4]. This patient volume demands rapid turnover, with surgeries scheduled within days, depending on the severity. While efficient, this rapid throughput comes at the cost of patient privacy and doctor-patient interactions. In contrast to the NHS, where consultations are more private and thorough, consultations in China can occur in shared

TRAINEE MATTERS



spaces, with multiple patients in the same room. Patients may also directly approach doctors to inquire about prescriptions or their position in the queue, reflecting a more informal and transactional approach to care compared to the NHS's more structured, patient-centred environment.

Another distinctive feature of China's healthcare system is the integration of both Western and traditional Chinese medicine (TCM). Although TCM plays a limited role in ophthalmology, it remains a significant part of the broader healthcare landscape. Patients may seek both TCM and conventional treatments simultaneously, reflecting China's cultural acceptance of complementary medicine. In contrast, the NHS is firmly grounded in a standardised, evidence-based approach, where treatments are primarily guided by Western clinical trials, and the option to choose alternative therapies is typically unavailable [5].

In summary, China's healthcare system, with its rapid access to care and significant patient volume, is significantly different to the NHS's more equitable but slower care model. While China's system allows for faster treatment, it introduces disparities based on financial means and compromises on privacy and quality of interaction.

The NHS, on the other hand, offers more comprehensive and personalised care but struggles with long waiting times and capacity constraints. Both systems exemplify the complex balancing act between efficiency, equity, and quality in healthcare delivery.

Dry eye disease

During my stay, my mentor gave me a tour of the hospital, introducing me to various specialised departments, including a private area dedicated to laser eye surgeries. I was particularly struck by the scale of the facility, with 10 theatres exclusively dedicated to cataract surgery, alongside many others operating simultaneously. The breadth of ongoing clinical work gave me the privilege of observing a wide range of surgical procedures, including oculoplastic surgeries such as blepharoplasty and



entropion correction, as well as paediatric surgeries like exotropia correction.

Furthermore, a unique aspect of the hospital was the Dry Eye Treatment Centre, a space dedicated to managing one of the most common and persistent conditions encountered in their general ophthalmology clinics. Unlike the more clinical atmosphere of other departments, the centre offered a tranquil, spa-like environment. Here, patients underwent treatments such as manual gland expression, steaming masks, and cooling compresses - procedures designed to stabilise the tear film and alleviate the symptoms of dry eye disease. It was within this centre that I gained a deeper understanding of dry eye disease and the innovative approaches being used to treat it.

Conclusion

My elective at Zhejiang University Second Hospital was a transformative experience that deepened my clinical skills and broadened my understanding of global healthcare systems. Working in China's fast-paced, high-volume environment gave me a new perspective on patient care, as it stands a distance from the more structured, personalised care of the NHS. Beyond the clinical experience, this opportunity allowed me to connect with my ancestral roots, enriching both my personal and professional growth. Ultimately, this elective provided invaluable insights into ophthalmology, healthcare delivery, and the importance of cultural context in medical practice.

References

- China. The Commonwealth Fund. https://www. commonwealthfund.org/international-healthpolicy-center/countries/china#:~:text=China%20 achieves%20near%2Duniversal%20 coverage,cost%2Dsharing%20and%20 coverage%20gaps
- NHS waiting times statistics. NHS England (2023). https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/rtt-data-2023-24/#Apr23
- Population density data. World Bank (2021). https://data.worldbank.org/indicator/SP.POP. TOTI 2locations=CN-GR



- Chen Y, Li L, Zhao L, Wang X. Patient flow in Chinese hospitals: Efficiency and challenges. J Health Management 2020;35(4):556–64.
- Bouskill K, Zhang Y, Luo L, Wang Y. Integrating traditional and Western medicine: A case study of Chinese healthcare. BMJ Open 2022;12(6):e059571.
- Sullivan DA, Evans T, Sharma A. Dry Eye Disease: Pathophysiology and Symptoms. J Ophthalmol 2017;42(3):163-70.
- Lemp MA, Baudouin C. Dry Eye Disease: Advances in Diagnosis and Management. Adv Exp Med Biol 2019;1185:145–53.
- Baudouin C, Labbé A, Liang H, et al. Pathogenesis and Management of Dry Eye Disease: A Review. Ocul Surf 2016;14(3):119–30.
- Patel DV, McGhee CNJ, McAuliffe J. Dry Eye Disease and its Pathogenesis: Clinical Insights. Clin Exp Ophthalmol 2021;49(2):218–27.
- Cheng S, Lu Z, Zhang X, et al. Lifestyle Modifications and Patient Education in the Management of Dry Eye Disease. Ophthalmic Physiol Opt 2021;41(5):626–34.
- Rolando M, Codenotti M, Sasso M, et al. Artificial Tears and Lubricants for Dry Eye Disease: Efficacy and Application. Br J Ophthalmol 2019;103(10):1424-9.
- Sullivan RM, Durrani O, McMenamin P, et al. Cyclosporine A in Dry Eye Disease: Mechanisms of Action and Efficacy. Eye Contact Lens 2020;46(6):330-5.
- Jenkins SG, Goodwin I, Brown C, et al. Meibomian Gland Dysfunction: Diagnosis and Management. Br J Ophthalmol 2021;105(6):701–8.
- Liu Z, Wang X, Xu Y, et al. Nanomedicine in the Treatment of Dry Eye Disease: Current Applications and Future Directions. J Ocul Pharmacol Ther 2022;38(2):89–95.

[All links last accessed February 2025]

AUTHOR



Grace Loy, FY1 Doctor, Royal Victoria Infirmary, Newcastle, UK.

SECTION EDITOR



Abdus Samad Ansari,

TSC Glaucoma Fellow, Specialty Registrar in Ophthalmology (ST7), Moorfields Eye Hospital NHS Foundation Trust.

abdus.ansari@kcl.ac.uk

Declaration of competing interests: None declared.