can help them maintain adherence by reminding them and helping them to instil the medication.
- Patients' **physical health**. This can include their ability to administer eye medication, for example, if they suffer from arthritis. Can someone else help them? Find out if there are installation aids available locally, which make it easier for patients with conditions such as arthritis to instil their own drops.
- Patients' **cognitive health**. Patients with cognitive impairments, dementia, or attention deficit disorder may struggle to remember when to use their eye drops and may require support from others or electronic reminders (e.g., by programming mobile phones to remind them of medication times).

A note on patient comfort

Stinging sensation or blurring of vision is a common side effect of many eye drops. As this is transient, it is usually better to educate the patient about this possibility and teach them to cope if it is not severe, as changing medication may not be possible, or will be prohibitively expensive. One exception is chlorhexidine, which can be locally manufactured using a buffer solution which reduces stinging sensation (see page 21).

Q&A: Prescribing glaucoma medication

Mohammed Abdull

My preferred choice for most of my glaucoma patients is to prescribe a combination drug treatment, used just once or twice a day.

Q. Why a combination drug?
A. It is better to prescribe as few different types of drops as possible, because the chance of poor adherence increases with the number of medications used. Therefore, if multiple medications are needed, it makes sense to use drug combinations: one eye drop bottle that has two or more active ingredients that work together safely and effectively.

Q. Why less often?
A. It is always preferable to give patients medications that require as few instillations per day as possible. This is because the chance of poor adherence increases with increasing instillation frequency of the drug. So, an eye drop that is used just once a day is usually better adhered to than one that must be used four times a day. In this respect, it makes sense to use slow-release preparations, if available.

CASE STUDY

Boateng Wiafe
Technical Advisor: Operation Eyesight Universal, Calgary, Canada.

Supporting patients with adherence to glaucoma medication in Ghana

Patients need help in many areas – including advocacy for affordable eye medicines.

In Ghana, as in many other low- or middle-income countries, patients who are prescribed medication for glaucoma often stop using their medicines and only come back when their sight has worsened considerably. It is important, from the beginning, to educate patients about the chronic nature of glaucoma and for them to understand that any treatment is lifelong.

Here are some of the reasons patients have given:

- "I used the eye drops only when I felt the symptoms."
- "I felt better with eye drop treatment. I did not feel the need to use the eye drops all the time, so I use them sometimes."
- "The frequency of use instructed by the ophthalmologist or pharmacist is too much."
- "The price of eye drops is too high, so I do not buy it all the time because my pension is very small."

It is important, from the beginning, to educate patients about the chronic nature of the disease (glaucoma) and for them to understand that any treatment is lifelong. Some patients view the disease to be like malaria, where a stated dose of drug is taken and is sufficient for a cure. They need to understand that this is not the case for glaucoma.

Meeting of a chapter of the Glaucoma Patients Association of Ghana with a guest facilitator. GHANA

The first and most important step in supporting adherence is therefore patient education and counselling about the importance of – and reasons for – adherence. High patient loads in many eye clinics don't allow specialist eye health care providers to spend much time with the patient, so talking to patients about medication and adherence is often done by nurses, allied health personnel, or trained community eye health volunteers.

In Ghana, patients are counselled by community eye health volunteers, who are trained according to the WHO Afro Primary Eye Care training manual (**www.afro.who.int/publications/primary-eye-care-training-manual**), which has a strong emphasis on health education and counselling, including counselling patients on using their eye medication.

Other strategies we use to support adherence include:

Involving family members or care givers. Making sure that family members or care givers understand what the patient must do, and why, really helps to improve adherence to eye medications, particularly those for chronic conditions such as glaucoma. We always advise elderly patients to come with a care giver if possible. The caregiver is also shown how to apply or instil the medication.

Phone calls. We keep a register of all our glaucoma patients, and we call them within 2–3 months to ask how things are going with the medication. We also try to help solve any problems they have.

Counselling and continuous health education in the community. Peer counselling, via patient groups, is another means to support patients. Clinicians can encourage patients to form associations and share personal experiences with each other. In Ghana, for example, there is an association of patients with glaucoma called the Ghana Glaucoma Patients Association. They provide peer education for new patients, invite counsellors to meetings to address patients' issues, carry out advocacy, and participate in World Glaucoma Week activities to create awareness of glaucoma.

Advocacy for reduction in medication costs. Patients can't be expected to be adherent if the medication is not affordable. In countries with health insurance schemes, it is important to talk to insurance providers and make sure that effective eye medication is included on the list of medicines they cover, or on the national approved list. Another option is to ask for donations from pharmaceutical companies and non-governmental organisations on behalf of those who really need medication but cannot afford to pay for it. Operation Eyesight Universal has set aside funds to support some patients in Ghana who are unable to afford their medication, but this is only a short-term solution. Advocacy is key, and one of the things we are working on right now is advocacy to persuade Ghana's national health insurance agency to add more glaucoma medications to their list.

ADVOCACY

Inclusion of eye medication in national health care systems

Junu Shreshta
Policy & Advocacy Manager: International Agency for the Prevention of Blindness, London, UK.

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Optometry & Primary Care Adviser: The Fred Hollows Foundation, Melbourne, Australia.

Jude Stern
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Advocacy for eye medicines is easier with these helpful resources and guidance.

With so many eye medicines available, the WHO model list provides helpful guidance.

The World Health Organization (WHO) maintains a model list of essential medicines. The essential medicines include those that satisfy the priority health care needs of a population. The medicines are the most effective, safe, evidence-based available and are comparatively cost-effective. They are intended to be available in health systems at all times. WHO recommends that countries make these medicines available in the appropriate form and dosage, and ensure that they are available, accessible, and affordable to everyone in need. Universal access can only become possible only when medicines are included in a country's essential medicines list and funded by the national health financing system.

The WHO model list of essential medicines includes ophthalmic medicines in section: 14.1 diagnostic agents: ophthalmic medicines; and section 2: ophthalmological preparations. This information needs to be communicated to the policy makers and referred when advocating for universal eye health. The latest list is available here: **bit.ly/WHO-em**

The WHO's Package of Eye Care Interventions (PECI), launched at the World Health Assembly in 2022, is a set of evidence-based eye care interventions and the resources needed for their implementation. PECI – which includes the list of ophthalmic medicines in the WHO essential medicines list – is designed to support policy makers and technical decision makers to integrate eye care into the health care services system of a country. This tool is an important resource when advocating for the inclusion of essential eye medicines in a national essential medicines list and in health financing benefit packages.

When advocating for eye medicines, also refer to the United Nations' Sustainable Development Goals, target 3.8. This target focuses on achieving universal health coverage, including financial risk protection, access to high quality essential health care services and access to safe, effective, high quality affordable essential medicines and vaccines for all. Without provision for equitable access to essential medicines for eye conditions, achieving universal eye health coverage is not possible.

Access to essential ophthalmic medicines also aligns with the principle of integrated people-centred eye care (IPEC). The IPEC was adopted by the 73rd World Health Assembly resolution in 2020. To know more about advocating for IPEC, check out IAPB's IPEC Advocacy to Action Toolkit. The toolkit includes PowerPoint slides, letter and IPEC policy brief templates that can be adapted and used to approach stakeholders for policy dialogues.

The WHO has also produced guidelines on using the WHO Model List of Essential Medicines to update the national essential medicines list. See **https://bit.ly/useWHOem**