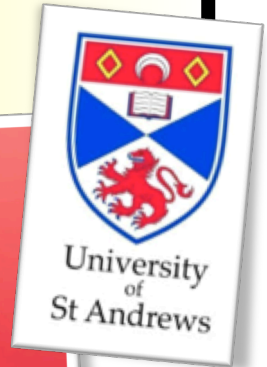


Solar Powered Innovation

Lets Make Disability History in Malawi

St Andrews Rotary Club Appeal



Too much disease

Malawi is one of the world's poorest countries with an under-staffed and over-stretched health care system. Unsurprisingly it has a very high burden of disability and ill health. This limits the economic growth of the country. Over 1 in 100 people are needlessly blind with a similar number deaf.

Early diagnosis helps

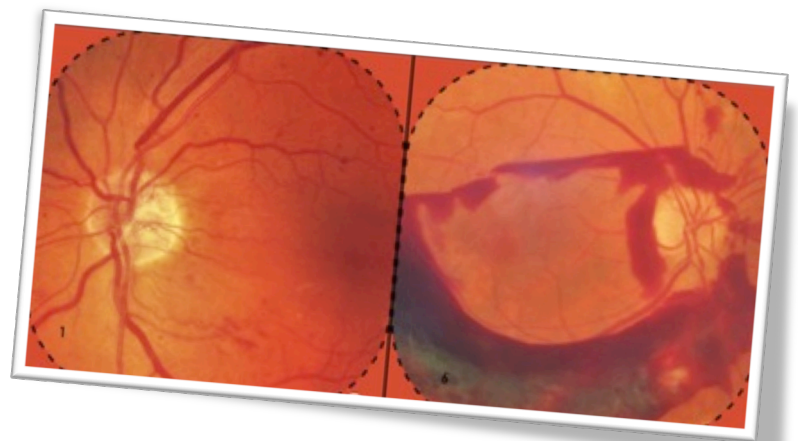
Lack of affordable and practical diagnostic tools is one of the main obstacles to accessing treatment. Cataract, glaucoma and trachoma are the main causes of blindness and can all be treated if diagnosed early. New causes of blindness are adding to the misery as the epidemic of diabetes grows. Childhood eye disease blights those affected for life and can even lead to early death.

Equipment is too expensive

All these conditions are easily diagnosed with a little bit of training and simple tools. Eye (ophthalmoscope) and ear (otoscope) examination tools are however rare in Malawi. This is because they are impractically expensive to buy in the first place. Even if a health care worker is lucky enough to own one they hard to maintain in working order as they need costly and hard to find bulbs and batteries to keep them working.



Eye disease screening in childhood does not just mean better vision when a child grows up; it's the difference between life and death



Diabetes causes bleeding at the back of the eye. It can only be diagnosed by looking into the eye with an ophthalmoscope. At the moment too many people with diabetes present blind with untreatable disease



Recognise the problem and act

Recognising and understanding the barriers to treatment the University of St Andrews Global Health Team developed and evaluated a new solar powered LED illuminated ultra low cost ophthalmoscope and otoscope called the Arclight.

Design frugal equipment 'fit for purpose'

The Arclight has been shown in trials to be as effective as much more expensive traditional tools. But in addition it is robust and portable and importantly does not require replacement bulbs or batteries. The Arclight for the first time offers the opportunity to empower health care workers in all low-income countries to perform comprehensive eye and ear examinations to reduce needless disability.



The Solution

The Rotary club of St Andrews have consequently joined with the Global Health Team of the University of St Andrews to distribute Arclights to all trainee nurses, clinical officers, optometrists and doctors in Malawi over three years. The distribution will be complemented by delivery of a training package of simulation tools and materials also developed and evaluated by the Arclight team. Identification and training of Arclight Ambassadors and continued delivery of devices through profit generated from the Arclight Social Enterprise and will ensure the initiative is self-sustaining.

Our Ask of YOU

Over the 3 years of the distribution and training programme we expect to empower over 3,000 trainee health care workers with each Arclight device costing £10.

Our ask of you is to consider donating and raising funds to help purchase these devices and support this important Rotary project.

