

# Barriers to Setting up a Vitreo-retinal Unit of Ophthalmology in Ibadan, Sub-Sahara Africa

Sir,

Vitreo-retinal unit of ophthalmology has become a necessity in the developing countries. Previous workers pointed out that ocular diseases that were hitherto incurable have become manageable by vitreo-retinal surgical techniques.<sup>[1,2]</sup> Diagnosis of diabetic retinopathy, age-related macular degeneration, retinal detachment, and other vitreo-retinal diseases have improved, hence the need for vitreo-retinal units in the hospitals. Treatment of posterior segment disorders, such as clearing of vitreous opacities and complicated retinal detachments are now possible with vitreo-retinal surgery. Furthermore, management of certain anterior segment disorders has also improved with the availability of vitrectomy. The number of cataract surgeries in the developing countries has increased, hence the number of vitreo-retinal complications requiring treatment.

Earlier, we published our experiences with retinal diseases in our institution and the need to establish a vitreo-retinal center.<sup>[3]</sup> The International Council of Ophthalmology and The International Agency for the Prevention of Blindness visited our institution and initiated sponsored fellowship training in the subspecialties including vitreo-retinal. Furthermore, equipment for subspecialties were purchased and donated by the sponsors. Vitreo-retinal equipment such as a vitrectomy console, endophotocoagulator, and endoilluminator were donated. However, setting up of a vitreo-retinal unit is still faced with some challenges.

## CHALLENGES

### Manpower development

The sponsors helped train a vitreo-retinal fellow which is a major step [Figure 1]. The unit trained theater nurses who specialized in vitreo-retinal surgery but the training of other support staff such as equipment

maintenance personnel, who is familiar with the sophisticated vitreo-retinal equipment is needed.

### Equipment

Vitreo-retinal equipment is expensive and may be beyond the reach of a public hospital such as ours. Donation of the vitreo-retinal equipment is a welcome development. It is sad to note that the equipment still needs accessories that are not readily available in the developing countries. Minimum requirements include a slit lamp with applanation tonometer and indirect ophthalmoscopy. Other facilities such as fundus photography, fluorescein angiography, and optical coherence tomography are essential. The retinal unit will be incomplete without facilities for ocular ultrasonography, laser photocoagulation, and vitrectomy. Local adaptations are encouraged as is done in developing countries such as India.

### Government or public hospital environment

Vitreo-retinal unit is only a part of the other units jostling for attention in our hospital. Vitreo-retinal unit is not a priority to policy makers. Making decisions concerning the unit are, therefore, delayed. Furthermore, response to requests from departments or units in a government hospital takes ages because of protocols. Autonomy for the ophthalmic departments is recommended to overcome these barriers.

### Power supply

Provision of constant electricity is a major problem in our country hence our institution. The vitreo-retinal equipment is fragile and easily damaged by frequent power interruptions and voltage surges



**Figure 1:** Our first scleral buckle surgery for retinal detachment after subspecialization

which are a regular occurrence. Generators are expensive to maintain in view of rising cost of fuel. The development of a solar source of electricity is suggested. The initial cost of installation though expensive can be recovered since the maintenance cost is low.

### Attitude of public workers

Public workers showed resistance to change and display apathy to new and innovative challenges when workload increases. In our hospital, regular stakeholders' meeting and education helped reduce this problem.

### CONCLUSION

Setting up of vitreo-retinal centers in the developing countries is imperative to reduce avoidable blindness due to vitreo-retinal diseases toward achieving vision 2020. However, the barriers discussed need to be borne in mind and addressed by hospitals in the developing countries hoping to set up such centers to avoid the frustrations associated with managing these diseases.

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