Recruiting and distributing eye health workers

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Recruitment of the right people to the right places requires local investment.

As with any market, the eye health labour market facilitates an exchange between the **demand** for trained personnel to meet the health needs of the population and the **supply** (or availability) of trained personnel.

The labour market in each country is influenced by a number of factors such as:

- Who is recruiting (private or public sector)?
- Where is the work required? (Urban or rural, or by level of service? For example, community level, district level or tertiary level)
- How many jobs are available, and what skills do they require? Are these new jobs, or replacement for retired personnel?
- How many skilled personnel are available to fill these posts? Are they graduates or transfers?
- What are the terms and conditions for the employment?

Recruitment of the right people to right places in eye health are influenced and challenged by a number of factors:

Continues overleaf ➤

SHANTANU DAS GUPTA

Testing visual acuity at a school screening camp. INDIA

Recruiting for local needs

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Dr Shroff's Charity Eye Hospital is a network of eye hospitals consisting of a main tertiary hospital in New Delhi, India and five smaller hospitals in surrounding areas. In 2012, we faced a significant shortage of trained allied health personnel (support workers), which prevented us from moving to a high-volume eye surgery model.

Because the candidates available locally were few and very inadequately trained, we decided to create our own workforce that would have the necessary skills and would be aligned to the mission, vision and values of our institution. In 2014, with the support of Lavelle Foundation for the Blind, we launched our own certified ophthalmic paramedic programme.

Deciding who to train

Rural Indian society in North India is deeply patriarchal, with girls considered to be less valuable than boys, and early marriage is a common cultural practice. To address this, the programme was limited to women from underprivileged backgrounds aged 18–21 who had completed high school and lived near one of the hospitals. We felt that the programme had the ability to not only improve the economic status of the family but would empower the women in the long run. Candidates are selected after a written test, a personal interview and a meeting with their parents. A five-month foundation course at the tertiary hospital is then followed by 19 months of on-the-job training at the hospital nearest to them. It all culminates in an internal certification exam and a formal graduation. Different modules train women as vision technicians, nursing assistants, operating theatre assistants, medical record administrators, front office personnel and patient counsellors. Other modules currently in development include optical services, housekeeping, stores & purchasing and basic accounting.

At the start of the programme, the big questions were:

- Would we get support from the community and the families?
- What proportion would leave after we had invested in their training and employment?
- Would this approach really help us to reach out to more patients and reduce avoidable blindness?

As expected, the recruitment of candidates was difficult initially, as it challenged cultural expectations. However, the reputation of the hospital and the ambition of the young women meant that 15 women were enrolled in the first year. After graduation, they became the best ambassadors for the course and the career pathway, which is evident in the fact that we currently have three intakes per year of 30 students each.

As a result of the programme, we have seen a 64% increase in the number of outpatients (from 250,000 to 400,000) and a 62% increase in the number of operations (from 18,000 to 29,000).

	2013–2014	2016–2017	% growth
Outpatients	245,357	402,429	64%
Operations	17,584	28,543	62%

Out of the 305 women trained to date, 30 (10%) have left Shroff at various stages, mainly because of moving away from the area after marriage.

The initiative is guided by a 5-year plan that links recruitment and training to our strategic goals on volumes. As a result, we have been able to assure jobs for all our graduates over the next five years, provided that the current growth in patient volume is maintained.

The labour market pressures we faced in 2012 forced us to take radical action. Before, we were just a hospital providing quality eye services. Today, we offer valuable employment that empowers young women and brings local communities closer to us.

- The number entering (from education or migration) into the labour market (the supply)
- Where the jobs are (which should ideally correspond with where the eye health needs are)
- The conditions of employment
- Policies on recruitment and distribution
- Numbers exiting the services (due to retirement, death or migration), which makes positions available.

The number entering the labour market

The number of eye health professionals trained annually are insufficient to meet the need. Data from the Vision Loss Expert Group (VLEG)[1] indicates the critical shortages experienced, and their impact on service provision. For example, fewer than 1% of the world's ophthalmologists are available to meet the needs of 4.8 million blind in Africa, and critical human resource shortages are experienced across all professional groups.

How to create a balanced eye team: an example from Malawi

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Malawi has a population of 17 million people, 87% of whom live in rural areas. There just twelve ophthalmologists in the whole country, equating to 1.4 ophthalmologists per million people – far short of the 4 per million recommended by the World Health Organization.[1] To make matters worse, eleven of the ophthalmologists are based in urban areas.

Eye teams have aimed to address this by running outreach services that include cataract surgery. However, sustaining outreach services is expensive and requires a lot of travelling, which can disrupt the entire health system. Patients often have to wait for months before gaining access to eye care services. In our experience, staff fatigue eventually results in fewer visits being conducted.

To bridge the gap in eye services, Malawi's ministry of health has now established a task shifting approach. This means that some of the services usually offered by ophthalmologists are shifted to, and offered by, mid-level or allied eye health personnel who are recruited from rural hospitals and given additional training.

Ophthalmic clinical officers (OCOs) are clinical officers who have undergone training in ophthalmology and received a diploma. OCOs can manage most eye conditions and perform basic extraocular surgery. There is currently at least one OCO in each rural hospital. OCOs can train further and become cataract surgeons or trichiasis surgeons.

Cataract surgeons are OCOs who have attended an additional one-year surgical training course at a teaching hospital. They are able to perform cataract surgery within their rural hospital. Trainees remain on full salary, and a non-governmental organisation (NGO) pays for their training and upkeep.

Trichiasis surgeons. OCO's working in trachoma-endemic regions are trained and equipped to undertake trichiasis surgery at community level. They are usually trained 'on the job' over a period of two weeks.

Optometry technicians are trained and posted to rural hospitals, where they provide refractive services.

Ophthalmic nurses are general nurses who have received further training in eye care and are able to manage patients in the wards and assist in theatre.

Equipment and consumables are often provided by the eye NGO partner working in an area,

KHUMBO KALUA

Task shifting: a trachoma trichiasis surgeon performing trichiasis surgery in the community. MALAWI

and supervision is conducted by the Regional Ophthalmologist in each area. For OCOs and cataract surgeons in particular, greater opportunities for promotion, and allowances for outreach work, encourage them to remain in the rural areas.

What has been the impact of the task shifting programme?

- Eye service delivery has improved, resulting in fewer cases referred to a tertiary hospital. In the case of trichiasis surgery, there have been an average of over 1,000 operations per year over the last three years, compared to less than 200 per year before task shifting was introduced. Districts with cataract surgeons are managing almost all cataract operations (except for complicated cataract) at district level
- Additional training has increased the performance of mid-level/allied ophthalmic personnel
- Fewer staff members are now involved in outreach
- Activities, such as referrals between rural and urban eye units, are now better organised
- The geographical coverage of eye health services have increased
- There has been a reduction in the level of inequity in access to eye health services between rural and urban areas.

In conclusion, task shifting has addressed some of the human resource gaps in eye health in Malawi, and has helped improve service delivery, especially the delivery of trichiasis surgery.

Reference

1 VISION 2020: The Right to Sight. Developing an Action Plan **www.iapb.org/vision-2020/**

Further reading

First Global Conference on Task Shifting **www.who.int/healthsystems/task_shifting/en/**

Task shifting to tackle health worker shortages **www.who.int/healthsystems/task_shifting_booklet.pdf**

Eliah E, Lewallen S, Kalua K, Courtright P, Gichangi M and Bassett K. Task shifting for cataract surgery in eastern Africa: productivity and attrition of non-physician cataract surgeons in Kenya, Malawi and Tanzania. Human Resources for Health 2014:12(Suppl 1):S4 **https://doi.org/10.1186/1478-4491-12-S1-S4**

Gichangi M, Kalua K, Barassa E, Eliah E, Lewallen S, Courtright P. Task Shifting for Eye Care in Eastern Africa: General Nurses as Trichiasis Surgeons in Kenya, Malawi, and Tanzania. Ophthalmic Epidemiol. 2015;22(3): 226-30. doi: 10.3109/09286586.2015.1040924.

Even if there are enough ophthalmologists, it can be a challenge to recruit enough nurses and allied ophthalmic personnel to achieve the right balance of skills in an eye team. This often requires local solutions, such as the training programme for local women in India described by Shantanu Gupta (p. 45).

Governments must plan and invest in the recruitment of new eye personnel, or risk the possibility that promising candidates will choose to work in private health care or leave the country in search of better jobs.

Distribution based on health needs

In the ideal setting, distribution of eye health workers would be based on where the demand is. In most low- and middle income countries, the eye health needs within rural settings are much higher than in urban settings, but attract very few eye health workers,[2] often due to the inadequate working conditions.

Health needs are also changing, and the range of specialisations also need to be considered when distributing the skilled workforce. For example, the growing burden of diabetic retinopathy will require personnel for the establishment of services for screening, grading and treatment.

Conditions of employment

Entry into employment needs to be balanced with how many are leaving the service; it is not always about creating new posts. Exit points may be due to death, retirement, migration or even a change from full-time to part-time roles. Employment conditions also need to be considered when trying to attract the right people to the right places (pp. 48–50).

Policies on recruitment and distribution

Policies at the regional, national and local level need to evolve based on changes within the labour market, such as the migration of eye care workers to high-income countries.

Planning health workforce recruitment is a complex process. IAPB Africa is currently taking action to develop a harmonised, competency-based training curriculum to improve the distribution of skills in the eye team. The usefulness of mandatory placements to rural districts, and/or bridging the gaps through outreach services, need to identified by each country. Khumbo Kalua describes how this was done in Malawi (p. 47).

Recruitment must be carefully planned. Investment in hiring, placement and appropriate working conditions are essential to achieve universal access to good quality eye care.

References

1 Bourne RRA, Flaxman SR, Braithwaite T, Cicinelli MV, Das A, Jost B et al., on behalf of the Vision Loss Expert Group. Magnitude, temporal trends and projections of the global prevalence of blindness and distance and near vision impairment: a systematic review and meta-analysis. Lancet 2017;5(9): e888-e879

2 1 Palmer JJ, Chinanayi F, Gilbert A, Pillay D, Fox S, Jaggernath J, et al. Trends and implications for achieving VISION 2020 human resources for eye health targets in 16 countries of sub-Saharan Africa by the year 2020. Hum Resour Health. 2014;12(1):1-15.

From the field

Policy making to address imbalances in human resources for eye health in rural Kenya

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A human resources mapping study in 2011 highlighted that Kenya had attained the WHO target of 4 ophthalmologists per million population. However, 49% of the ophthalmologists were based in the capital city and served only 8% of the overall population. The cataract surgical rate was 553 operations per million population per year, which is significantly below the required rate of 2,000 per million population per year.

Shortages in the health workforce in Kenya are aggravated by the country's limited training capacity and the steady, internal migration of health workers from rural to urban areas, which is driven by economic, social, professional and security factors.[1] This is an example of the inverse care law,[2] which states that medical services are inverse to the need in the population.

This problem called for a comprehensive and integrated investment in incentives to recruit and retain personnel in rural areas.[3,4]

We conducted a literature review, collected data from existing policy documents, and carried out interviews with key informants on strategies for the recruitment and retention of (eye) health workers in Kenya. We wanted to collect evidence about:

- Trends in the recruitment and retention of health workers in rural districts
- Existing policies, strategies and interventions to retain health workers, and their impact
- Existing retention incentive schemes, and their impact
- Lessons learned and guidelines for non-financial incentive packages to promote the retention of health workers.

The evidence was discussed in 2018 at the annual Kenya Health Forum meeting,[5] and the following actions (supported by changes in policy) were agreed.

- Setting up an integrated human resource information system to plan the training and distribution of the workforce
- Planning national, comprehensive training needs assessments (TNAs) to gather detailed evidence about which eye care professionals are needed where. This takes place every two years, and the the next one is planed for 2018
- Developing and implementing a human resource advisory group responsible for improving the welfare of the workforce in order to improve productivity and retention, especially in rural areas.

The Ophthalmic Services Unit of the Kenyan Ministry of Health now works with partners to offer affordable scholarships as an incentive for people from marginalised rural counties wanting to join the eye health workforce.

The progress of these initiatives will be evaluated at the Kenya Health Forum meeting in 2019.

References

1 David M Ndetei LK, Jacob O Omolo. Incentives for health worker retention in Kenya: An assessment of current practice. 2018. Epub May 2018. **www.equinetafrica.org/sites/default/files/uploads/documents/DIS62HRndetei.pdf**

2 Bastawrous A, Hennig BD. The global inverse care law: a distorted map of blindness. The British journal of ophthalmology. 2012 Oct;96(10):1357-8. PubMed PMID: 22740107. Pubmed Central PMCID: 3457914.

3 Ministry of Health, Kenya. Norms and standards for health service delivery. 2006. Epub 2006.

4 IAPB. The crisis in the eye health workforce in Africa. 2014. Download from **www.iapb.org/resources/addressing-the-eye-health-work-force-crisis-in-sub-saharan-africa/**

5 Ministry of Health. Kenya Health Forum communique. 2018. Epub.