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Clinical Training of African Optometrists: An Indian Experience

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Abstract:

Background: In view of the continuous expansion of the scope of optometry, there is the need for further study and specialization. A fellowship in Clinical Optometry is designed to refine and master clinical skills in different specialty areas. Aim: The aim of this case report series was to assess the learning experience, benefits and challenges of African optometrists who underwent clinical optometry fellowship training in India.

Methods: A descriptive and qualitative questionnaire was used to assess the learning experience of seven African Optometrists who underwent a long-term fellowship program in India until 2017 was studied. The analysis was done using Windows 7, Microsoft Excel. Results: The mean age of participants was 31 years (71.4% male). The qualification prior to the clinical fellowship was Bachelor of Science in Optometry (14%), Doctor of Optometry (71.4%) and master in Clinical Optometry (14%). The areas of fellowship training for the participants included Comprehensive Optometry, Cornea and Anterior Segment, Posterior Segment and Pediatric Optometry. All (100%) of the participants found the skills useful post fellowship as well as the academic activities during the training. However, stressful working hours and environmental challenges were common.

Conclusion: The fellowship training was useful to the African optometrists in terms of skills acquisition and management of patients. Despite these benefits the participants experienced challenges ranging from language barrier and funding to working hours and cultural differences.

Keywords: Optometry, education, fellowship, clinical training, India

1. Introduction

Optometry as a primary health care profession has undergone transformation from an optical driven profession to a multi-specialty profession which caters for the need of not just the eyes but the visual system [1].

The World Council of Optometry (WCO) defines Optometry as a healthcare profession that is autonomous, educated, and regulated (licensed/registered), and optometrists are primary healthcare practitioners of the eye and visual system who provide comprehensive eye and vision care, which includes refraction and dispensing, detection/diagnosis and management of disease in the eye, and the rehabilitation of conditions of the visual system [2]. Currently according to World Health Organization (WHO) report, there are 285 million people with visual impairment, of this 39 million people are blind and 246 million have low vision globally. Africa makes up 11% of the world's population and of this an estimated 6 million are blind while China makes up 20% of the world's population but has 8 million blind people [3]. This sort of significant uneven distribution of blindness burden has driven more focus to improve eye care services in Africa. Hence to address these public health problems, well qualified and trained eye care professionals could play key role.

Post graduate optometry training programs are available around the world to enable optometrists cater to the need of a wide variety of patients with different visual conditions [4,5]; but there exists heterogeneity in education as well as legislature of the profession. There is also an increase in the need for optometry services and diversity in the level and scope of practice [7]. This in balance brings about the need for eye care professionals to travel and acquire knowledge in different countries with better programs. This journey comes with challenges that the professional must deal with during course of training.

L V Prasad Eye Institute (LVPEI) is one of the institutions offering clinical training to eye care professionals around the world since its inception 30 years ago. There have been many African optometrists admitted into the short-term program and few to the long-term program of LVPEI. Assessment of experience and feedbacks of trainees potentially contributes to the evaluation of a programs impact. This study sheds light into the experience of African optometrists who underwent specialty long term optometry fellowship up to 2017 in a tertiary hospital in India.

2. Objective

The aim of this study was to assess the learning experience, benefits and challenges of African optometrists who underwent long term clinical optometry fellowship training in India.

3. Methods

This study is a case report series conducted on long-term (minimum of 12 months) African optometry fellows whom completed their training at L V Prasad Eye Institute from 2011 to 2017. The study was done in August 2017. A total of seven (7) out of nine (9) African optometrists who obtained their optometry degree in Africa and underwent a long-term fellowship program at the LVPEI agreed to participate in the study. Participants e-mail addresses were obtained from the LVPEI education department with due permission.

A self-administered questionnaire designed for the purpose of this study was sent to the e-mail address of the participants who consented. Responses were collected and the data was analysed using Windows 7, Microsoft Excel version 2013 15.0.4805.1003.

3.1. Exclusion Criteria

African optometrists who underwent undergraduate and post-graduate training outside Africa or the ones who decided to not to participate in the study were excluded.

4 Results

The mean age of the participants was 31 years (range from 24 to 40 years), 5 of the participants were male. The qualifications prior to clinical fellowship included Bachelor in Optometry (1), Doctor of Optometry (5) and Master of Science in Clinical Optometry (1). The work experience of the trainees prior to fellowship training ranged between 1 to 12 years. The participants were represented from different regions of Africa, which included 3 from Ghana, 2 from Nigeria, 1 from Ethiopia and 1 from Mozambique as shown in Figure 1.

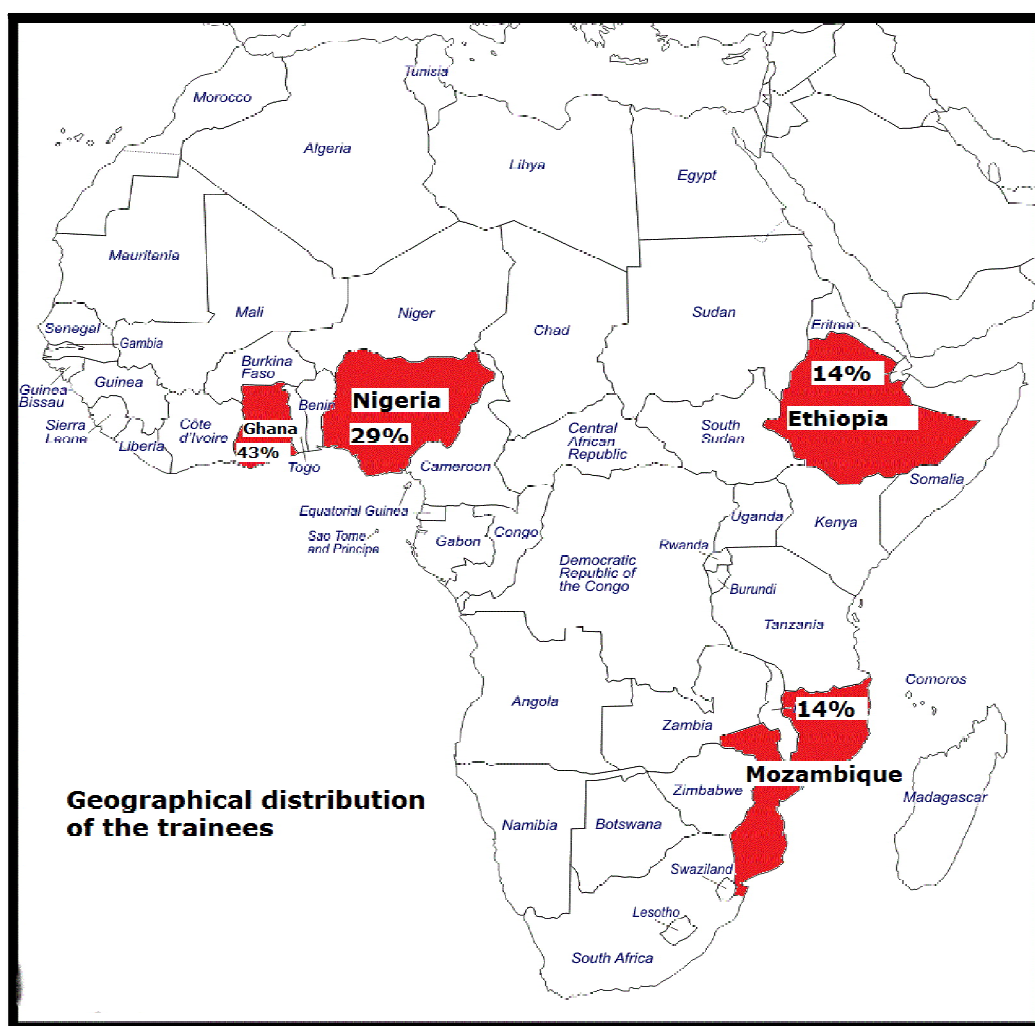


Figure 1: Geographical Distribution of the Trainees

Prior to joining the fellowship program, the fellows had worked in different sectors of eye care which includes: four (4) in government institutions, two (2) in private institutions and one (1) in a Non-Government Organizations (NGO).

Most of the trainees specialized in Comprehensive Optometry, followed by Cornea and Anterior segment, contrary to expectation none of the trainees underwent for oculoplasty/ocularistry fellowship (Figure 2).

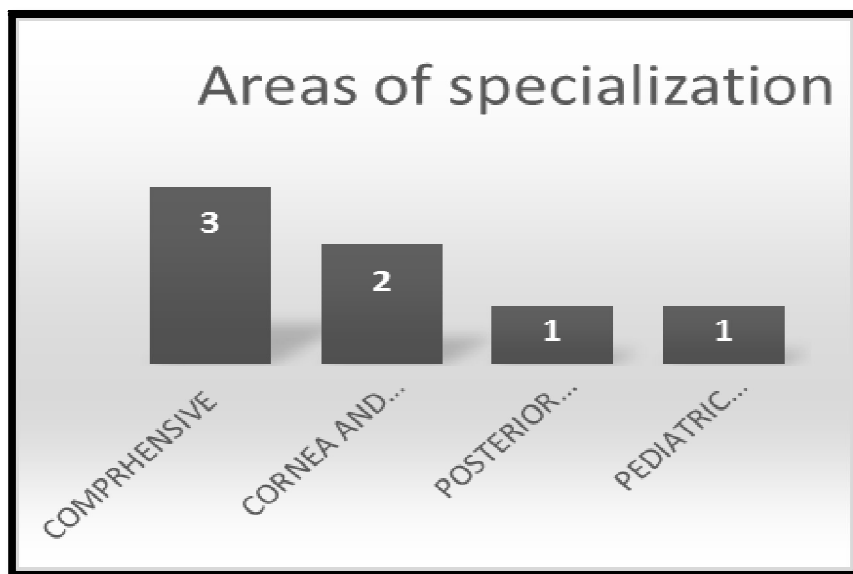


Figure 2: Areas of Fellowship Specialization Underwent by the Trainees

Four (4) of the participants underwent a 13 months long term fellowship and three (3) trained for 18 months. The fellowship training duration was found adequate by 4 of the participants however the remaining 3 found it as very long. Most of the participants became aware of the fellowship program through self-effort (n=5) and the remaining two (2) through friends. Even though most of the participants came from government sector, only two (2) were government sponsored whereas 3 were self-sponsored and 2 participants obtained funding from other sources. Only two (2) of the participants stayed in the hostel provided by the institute while 4 stayed outside the hostel and 1 spent half of their fellowship period in the hostel and the other half outside the hostel. Overall the training experience was described as excellent by 4 of the participants and good by the other 3 participants. Six (6) of the participants found the experience very useful for their post fellowship practice and only 1 participant found it just useful.

The major challenges faced by the trainees were culture, language, food and extended working hours. Of the 7 study participants 6 considered language difference as manageable while in terms of culture though different from their background, all participants considered it adaptable and it was not found to be a problem in the interaction with locals. The food items especially in the working place were difficult to adapt to for 5 of study participants who faced this challenge. The working hours schedule was considered as hectic and stressful by all of the trainees (Figure 3).

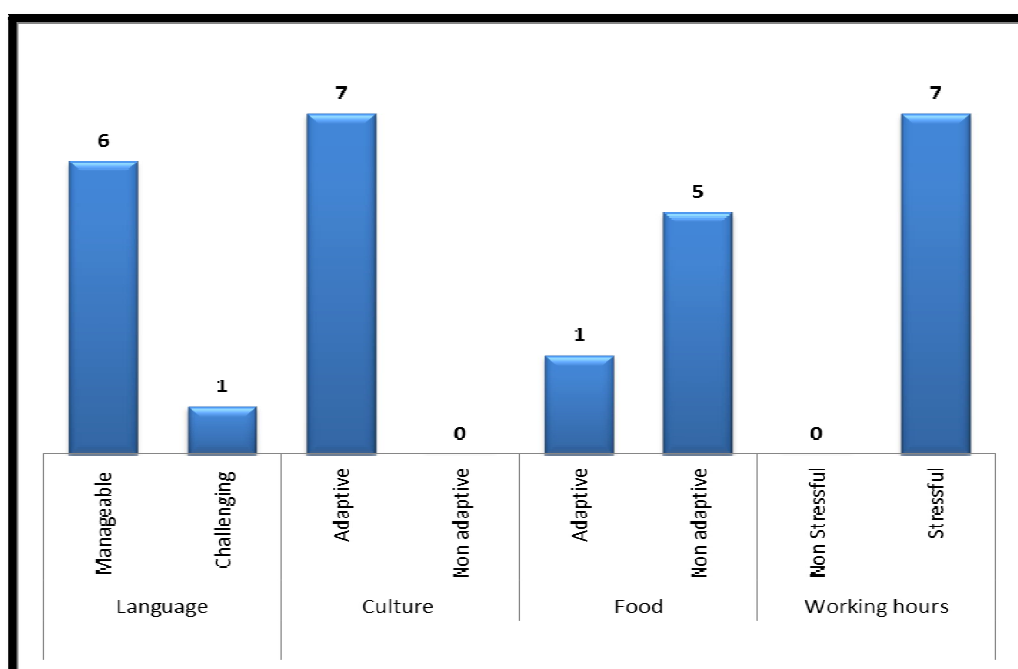


Figure 3: Challenges Faced by Trainees during Their Training Period

Post fellowship, most participants found the acquired training skills and academic activities useful.

Regarding the communication between the fellows and the consultant optometrists, 2 found it very good, 3 just good, 1 found it bad and 1 participant preferred not to comment on this. The communications between the optometry fellows and ophthalmologists was found to be average by 4 and very supportive by 3 participants.

5. Discussion

This case series sheds light into the experience and self-reported impact of a post graduate fellowship program in India for optometrists. In our study, there was a male preponderance in the study population. Of the seven participants 5 were males and 2 females. This gender difference in access to education is well known and is reported in literature [8]. There are differences in the optometry training programs offered across the African continent in terms of the curriculum, degrees, distribution and location of training institutes [7]. Similarly, in this study there were more trainees from Western Africa (72%) compared to other regions of Africa. This difference could be due to the broad optometry educational program in West Africa hence bringing about better information, exposure and idea of the importance of post graduate specialty programs.

There is a necessity for increase in the post graduate specialty optometry programs offered in Africa to meet the needs of the ever-growing African population. The government in different African countries have organized and collaborated with several NGO's to bring about realization of avoidable blindness set by vision 2020 [7,9].

Most of the trainees in this study worked for government organizations, while a handful worked in NGO's and private sector. But in terms of financial support for trainees, majority were self-sponsored, while others were either government-sponsored or received funding from other sources. This probably indicates that support of African governments to the development of optometry specialty training. This decrease in availability of trained and qualified optometrists to meet the ever-increasing need of the African population is well known even in countries with optometry training institutes [7].

This day, information can have obtained through internet, social media, broadcasts media, colleagues contact, from advertisements, newspapers and so on [10]. Optometry training opportunities and information can be obtained through self-effort or through established connections with several institutes. In this study most of the participants became aware of the fellowship program through self-effort which possibly indicates limited collaboration between African optometry schools/institutes, associations and the Indian institutes.

Despite the tremendous academic benefits, the fellowship period was not a bed on roses. Challenges faced by trainees include cultural differences, language barrier, food and hectic schedules. Among these challenges, culture and language differences were manageable and did not influence the daily clinical activities of the trainees; this is found to be contrary to other studies also involving foreigners [11, 12]. Such a result in our study population may be due to the friendly scenario and environment enjoyed by the trainees prior to commencing clinical patient care. However, the food provided by the institute during the period of training was difficult to adapt as reported by participants.

Free and smooth communication between the practitioners in the workplace environment is vital for team work [13, 14]. In this study most of the trainees found the communication with optometry consultants to be good, although 28% of the participants found it bad or preferred not to comment. Likewise, inter-professional communication between the trainee optometrists and ophthalmologists was found to be either very supportive or average in this study. L. O'Mara et al reported different results among nursing students regarding communication; the group reported a communication gap between trainees and faculty both inter and intra-professionally [15]. This difference might be due to difference in academic discipline being discussed.

In addition, the study population comprised of international trainees which might contribute to them being more respected and given a friendly communication platform in order to give a good image of the institute. It was found that communication among trainees or peers was easy and rarely reported as a challenge.

6. Conclusions

The long-term clinical optometry fellowship training was useful to the African optometrists in terms of clinical skills acquisition, diagnosis and management of various ophthalmic conditions and also improvement in the use of ophthalmic instrumentation and interpretation of diagnostic tests.

Despite these benefits the trainees experienced significant challenges and were mostly self-sponsored.

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7.1. Competing Interests

The authors will like to state that they are alumni of the fellowship program from the LV Prasad Eye Institute and this study and its views are independent of the LV Prasad Eye Institute.

7.2. Disclaimer

The views and statements made in this article express the views of the authors and do not represent those of the any of the institutes or organizations mentioned.

7.3. Funding

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