

Original Research Article

The impact of scholarship-based training programmes for allied ophthalmic personnel in India

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ABSTRACT

Background: The availability of trained Allied Ophthalmic Personnel (AOP) is critical for effective eye care delivery, particularly in underserved regions. Globally, eye care professionals are insufficient to meet population demands, especially in low- and middle-income countries. India has approximately 40,000 optometrists and 30,000 ophthalmologists, with a significant concentration in urban areas, creating challenges for rural access.

Methods: This study evaluated a 100% scholarship-based AOP training programme in India using a mixed-methods approach. Data were collected through surveys, interviews, and self-developed questionnaires. AOPs were surveyed on job satisfaction, skill usage, career progression, income growth, and socio-economic changes. Employers provided feedback on AOP skills and organizational efficiency. Semi-structured interviews explored participant experiences and challenges.

Results: The study surveyed 62 AOPs with minimum one-year employment across India, predominantly female, with a mean age of 23±2.42 years. Participants held various roles, primarily Operation Theatre Assistants. Motivators for programme enrolment included financial goal setting, personal growth, skill improvement, and career advancement. The programme enhanced skills in computer operations, mobile applications, and hospital software. Many respondents expressed interest in returning to rural, underserved areas for future employment. Feedback from 7 employers and 4 training institutions highlighted improved community engagement and good retention rates. Identified challenges included dropout rates, lack of hands-on training instruments, and need for better student accommodation.

Conclusions: The free AOP training programme has positively impacted AOPs, their families, communities, and eye health institutions. Participants benefited professionally and personally, with potential for addressing workforce shortages in underserved areas.

Keywords: Allied ophthalmic personnel, Ophthalmic sciences, Impact of free training programme

INTRODUCTION

The availability and quality of trained Allied Ophthalmic Personnel (AOP) are critical to the effective delivery of

eye care services, especially in underserved regions where ophthalmologists and optometrists alone cannot meet the growing demand. Globally, the availability of eye care professionals, including ophthalmologists and

optometrists, is insufficient to meet population demands, particularly in low- and middle-income countries. India has around 40,000 practicing optometrists and approximately 30,000 ophthalmologists, with a significant portion concentrated in urban areas. This distribution creates challenges in rural regions where eye care access is limited. On a global scale, there are about 331,743 optometrists across 123 countries. High-income nations generally have better practitioner-to-population ratios, while many low-income countries suffer from severe shortages.¹⁻⁶

Additionally, the uneven distribution within countries exacerbates accessibility issues, leaving vast populations underserved. Efforts are required to expand training and ensure equitable distribution to meet growing demands for eye health services, especially with aging populations and increasing cases of visual impairment due to refractive errors and other conditions.

Allied ophthalmic personnel play a crucial role in delivering effective eye care services, especially in areas with a shortage of ophthalmologists. By providing appropriate training, setting up standard operating procedures, and leveraging technology, these personnel can enhance the efficiency, productivity, and quality of eye care teams. Task-shifting from ophthalmologists to trained allied ophthalmic personnel can help meet the increasing demands for eye care services.¹ The job responsibilities of ophthalmic personnel include conducting assessments of visual acuity, refraction, external eye examination, and various diagnostic tests. They also participate in community and school eye screening programmes and assist ophthalmologists in surgery. Ophthalmic nurses provide care to inpatients and assist in surgeries while operating room technicians prepare patients and operating rooms for surgery.²⁻⁶

Free training programmes for AOP aim to address critical gaps in the eye care workforce, especially in underserved areas, by enhancing skills and improving service delivery. However, their long-term impact on patient care, workforce sustainability, and community health outcomes remains unclear. Key areas of concern include the effectiveness of training in improving AOP competencies, their contribution to reducing service gaps, career progression post-training, and beneficiary perceptions of care quality. Additionally, challenges faced by participants during and after training require attention. A focused impact study is essential to evaluate these outcomes, optimize training models, and ensure sustainable contributions to the eye care sector.

METHODS

This study employed a mixed-methods research approach to comprehensively evaluate the impact of a free training programme for AOP. The sampling frame in the study involved AOPs across India who had completed one year of employment post-training, current employers,

family members, and associated healthcare service providers. Data from surveys were subjected to descriptive and inferential statistical analysis. Interview transcripts data underwent thematic analysis. A coding framework was developed to categorize responses into recurring themes. Key themes were identified to draw meaningful conclusions and link them to quantitative findings.

The study used a combination of self-developed questionnaires and interviews to collect data. The study period was March 2024 to May 2024 during which the respondents were interviewed. Questionnaires were administered to all participant groups to capture data. The AOP survey included questions on job satisfaction, skill utilisation, career progression, and income growth. Employers provided feedback on the practical application of AOP skills, organizational efficiency, and patient care improvements. Family member interviews highlighted socio-economic changes such as increased household income, improved access to healthcare and education, and shifts in social status.

Healthcare providers assessed operational benefits, including reduced workloads and enhanced service delivery. Semi-structured interviews were conducted after the administration of the questionnaire. These interviews allowed participants to share detailed narratives about their experiences. Trained AOPs discussed challenges encountered during employment, the adequacy of the training, and perceived benefits. Employers elaborated on how AOPs contributed to operational efficiency and patient outcomes. Family members shared anecdotal evidence of improved quality of life and societal perceptions. Healthcare service providers provided context on institutional changes influenced by the programme.

RESULTS

Allied ophthalmic personnel

Table 1 shows the total 62 AOP respondents from 7 training institutes, 18 are male (29.03%), and 44 are female (70.97%), indicating a higher female participation in the programme. The mean age of the participants was 23±2.42 years, suggesting a relatively young age group, likely in the early stages of their careers or education. The participants hail from various states across India. Madhya Pradesh (MP) has the highest representation, with 14 participants (22.58%), followed by Telangana (13 participants, 20.97%), and Gujarat (8 participants, 12.90%). Other states represented include Assam, Odisha, Punjab, and West Bengal, each contributing between 1-7 participants. The survey captured the average family income of respondents' parents and siblings. The father's average income per month is ₹ 23,451, while the mother's average income is much lower at ₹ 555. The siblings' average income per month is reported as ₹ 8,565, showing a wide variation in income across the family

members, with fathers earning significantly more than mothers and siblings. The participants represent a variety of designations within the ophthalmic sector. The majority of respondents are Operation Theatre Assistants (28 participants, 45.16%), with other designations including Vision care technician (27 participants, 43.55%), camp ward. In charge (1 participant), optometrist (1 participant), and others such as OPD executive and outreach coordinator. The average number

of employment years for respondents is 2.3±1.07 years. The average monthly income of the participants is ₹ 16,149.4, reflecting a moderate-income level. Most participants learned about the training programme through friends, colleagues, or word of mouth (56 respondents, 90.32%), while a small proportion discovered it via websites, blogs, or advertisements (6 respondents, 9.68%).

Table 1: Response of the AOPS trained under programme.

	N	%	
Sex/gender	Male	18	29
	Female	44	71
State	Andhra Pradesh	1	1.6
	Assam	7	11.3
	Gujarat	8	12.9
	Madhya Pradesh	14	22.6
	Odisha	7	11.3
	Punjab	5	8.1
	Telangana	13	21.0
	West Bengal	7	11.3
Designations	Camp ward in charge	1	1.6
	Ophthalmic nurse	2	3.2
	OT assistant	28	45.2
	OPD executive	1	1.6
	Optometrist	1	1.6
	Outreach co-ordinator	1	1.6
	Patient assistant	1	1.6
	Vision care technician	27	43.5
Knowledge about the training programme *	Colleague	20	32.2
	Friend	16	25.8
	Relative	20	32.2
	Website	2	3.2
	Advertisement	4	6.5
Motivation to join the training programme *	Personal growth and development	18	29
	Career advancement	5	8.1
	Skill enhancement	8	12.9
	Free learning opportunity	8	12.9
	Preparing for financial goals	23	37.1
Positive aspects of training *	Good quality training	16	25.8
	Good faculty support	6	9.7
	Scope for personal growth	5	8.1
	Scope for professional growth	3	4.8
	Learned social skill	1	1.6
	Learned finance skills	1	1.6
	Opportunity to do community work	3	4.8
	Good amenities	3	4.8
	Gained employment	1	1.6
	Overall training was good	23	37.1
Challenges during training *	Practical sessions missed due to COVID-19	9	14.5
	Inadequate leaves	1	1.6
	Self-expenses during exposure visits	1	1.6
	There is a sudden change in posting	1	1.6
	More importance to the degree course	1	1.6

Continued.

	N	%	
	Language as a barrier	14	22.6
	Food as an issue	6	9.7
	Lack of hostel facility	1	1.6
Topics that were easy to learn *	Patient examination and diagnosis	6	9.7
	Optical dispensing	3	4.8
	Vision test	2	3.2
	Slit lamp	3	4.8
	Practical	5	8.1
	Anatomy	3	4.8
	Community screening	5	8.1
	Eye diseases	2	3.2
	Refraction	2	3.2
	Retinoscope	2	3.2
Topics that were difficult to learn *	Retina	1	1.6
	Cornea	1	1.6
	Eye diseases and diagnosis	2	3.2
	Refraction	3	4.8
	Maths calculation	2	3.2
	Lensometry	1	1.6
	Practical	7	11.3
	Optical dispensing	1	1.6
Other learnings during training *	Computer operation	53	85.5
	Mobile operation	16	25.8
	Finance operation	5	8.1
	Banking operation	17	27.4
	Participation in online meetings	5	8.1
Support to family and community *	Motivated others for higher studies	5	8.1
	Role in community health improvement	20	32.3
	Provided financial support	18	29
	Became role model for others	4	6.5
	All of the above	8	12.9
	Not yet provided any support	7	11.3
Willing to go back to native, underserved areas and work	Yes	46	74.2
	No	16	25.8
Perceived equal contribution of both female and male in ophthalmic care	Yes	59	95.2
	No	1	1.6
	No comment	2	3.2

*Multiple responses allowed

The preparation for financial goals (23 participants), personal growth and development (18 participants), skill improvement (8 participants), and career advancement (5 participants) were the main motivators for participants to apply for the training programme. Most participants reported good services (26 participants), with 22 respondents expressing very good services. However, some negatives were also noted, such as missed practical retinoscopy and vision tests, and technical aspects like refraction and lensometry. The programme has helped participants gain knowledge in operating computers (40 participants), mobile applications (16 participants), and

sessions due to COVID-19 (9 participants), lack of leaves (1 participant), and self-expenses incurred for exposure visits (1 participant). The training curriculum was generally perceived as easy (31 participants), while 6 found it good and two considered it moderate.

Some challenges were highlighted, particularly in areas like language barriers, practical difficulties in areas like hospital software (13 participants), which are valuable skills for future professional opportunities. Others gained insights into finance, bank operations, and online meetings.

Table 2: Response of the parents on their ward receiving AOP training.

		N	%
Sex/gender	Male	28	62.2
	Female	17	37.8
Education	Illiterate	8	17.8
	Primary schooling	0	0.0
	Secondary schooling	30	66.7
	Senior secondary schooling	7	15.6
No. of children	1 - 2	24	53.3
	3 - 4	19	42.2
	>5	2	4.4
No. of earning family members	1 - 2	32	71.1
	3 - 4	13	28.9
Family monthly income in ₹	5000 – 10000	4	8.9
	10000 – 20000	12	26.7
	20000 – 30000	14	31.1
	30000 – 40000	9	20.0
	40000 – 50000	3	6.7
	>50000	3	6.7
Came to know of training programme through *	Advertisement	18	40.0
	Family member/ neighbour	19	42.2
	Friend/colleague/relatives	4	8.9
	Vision centre	2	4.4
	NGO/institution/hospital	2	4.4
Impact on family *	Financial support to family	22	48.9
	Education opportunities for other children	16	35.6
	Increase in respect in the community	7	15.6
Impact of AOP training on the beneficiary *	Improved confidence	11	24.4
	Skill development (improved communication, enhanced speech, behaviour, developed ophthalmic and other technical skills)	30	66.7
	Positive behavioural changes	3	6.7
	Career and financial independence	3	6.7
	Improved standard of living	3	6.7
	Gained respect and recognition	5	11.1
	No changes	1	2.2
Advantages of having AOP in family *	Improved community awareness	16	35.6
	Immediate family benefits	12	26.7
	Support for eye health services	24	53.3
	Motivation to other children	20	44.4
	Enhanced social respect	14	31.1
Family expectations from the AOP *	Achieve higher education and skills	25	55.6
	Contribute to society	2	4.4
	Become independent in life	15	33.3
	They should have a purpose in life	9	20.0
	Gain respect and recognition	2	4.4
	Nothing extra – continue to work as AOP	6	13.3
Alleviation in financial burden from family *	Significantly reduced financial burden	19	40.0
	Partial financial relief	12	26.7
	Enabled education and career growth in family	5	11.1
	Critical support during hard times	3	6.7
	Minimal or no impact	5	11.1
Impact on community *	Improved family reputation	21	46.7
	Enhanced community recognition	28	62.2
	Positive financial changes	4	8.9

Continued.

	N	%	
	Lifestyle improvements	6	13.3
	Encouragement for others	5	11.1
	Minimal or no changes	4	8.9
Response of community on student receiving AOP training *	Received positive community response	15	33.3
	Received respect and recognition	12	26.7
	Received appreciation	9	20.0
	Increased interest in the programme	7	15.6
	No response from community	3	6.7

*Multiple responses allowed

Many respondents have applied their newly acquired skills to make a positive impact on their community (20 participants), and personal finance (18 participants). However, a small portion has not yet used the knowledge gained beyond supporting themselves. A significant number of respondents expressed an interest in returning to their rural, underserved areas for future job or business opportunities (46 respondents), indicating a strong desire to contribute to these communities. Many participants see a positive future in the ophthalmic care field (33 respondents), with others hopeful for higher studies (15 participants) and good salary prospects (21 participants). A large majority of respondents believe there is an equal contribution from both genders in the ophthalmic sector (59 participants), highlighting a positive outlook on gender equality in the field.

Family members

Table 2 shows out of the 45 parents surveyed, 28 were male and 17 were female, showing a higher representation of males in the sample. In terms of education, most participants had completed secondary schooling, with 30 individuals having received this level of education, while 7 participants had completed senior secondary schooling. Notably, 8 participants were illiterate, and no participants had only received primary schooling or identified with other educational levels. Regarding family dynamics, the number of children varied among the participants. Most families had 1-2 children (24 families), while 19 families had 3-4 children, and 2 families had more than 5 children. When asked whether all children had formal education, the majority responded positively, with 43 participants confirming that their children were formally educated. Income data revealed that most families earned between ₹10,000 and ₹30,000 per month, with 12 falling in the ₹10,000–20,000 range and 14 in the ₹20,000–30,000 bracket. Smaller proportions earned between ₹5,000–10,000 (4 families), ₹30,000–40,000 (9 families), and ₹40,000–50,000 (3 families), while three families reported monthly earnings above ₹50,000. In terms of family workforce, most families had 1-2 working members (32 families), while 13 families had 3-4 working members. No families had more than four working members. This data provides valuable insights into the economic and educational dynamics of the surveyed population. Regarding the

programme, most participants learned about it through family members or neighbours (19 respondents), followed by advertisements (18 respondents) and friends, colleagues, or relatives (4 respondents). A smaller proportion discovered the programme through local vision centres (2 respondents) or NGOs/institutions/hospitals (2 respondents). The training programme has significantly impacted the families of participants in several ways. Financial benefits emerged as a primary positive outcome for 22 participants, who found improved financial stability through the skills acquired during the training. Additionally, 16 families experienced increased educational opportunities for their other children, likely due to the better financial standing of the household and enhanced perspectives on education. Seven families noted that the programme contributed to respect in the community, as the trained individuals gained recognition for their new skills and qualifications.

The training programme also resulted in noticeable improvements in the confidence and skills of the students. 11 participants observed an increase in confidence, while a larger group, 30 participants, highlighted significant skill development. This included improvements in communication, speech, behaviour, as well as ophthalmic and technical skills. 3 participants noted behavioural changes, and another 3 observed career and financial independence, suggesting that the programme helped build self-reliance. 3 families reported an improvement in their standard of living, while 5 families acknowledged that the programme brought them respect and recognition. Only 1 participant did not observe any changes.

The programme also altered the perceptions of many parents regarding their children's education and career. A significant number, 21 participants, felt that the programme brought financial stability to their family, while 14 expressed being grateful for the opportunity. Others saw their children's achievements with pride, and many parents recognised the good career opportunities available due to the skills gained. 8 participants noted that their children gained more confidence and independence, with some emphasizing the improved skills and knowledge. However, 2 parents mentioned there were no notable changes in their perspective.

Regarding the benefits of having a trained vision technician in the family or community, the responses were overwhelmingly positive. 24 families appreciated the support for eye health services, which became more accessible within the family and community. 16 families observed improved community awareness about eye health, while 12 families noted direct benefits to the immediate family. Furthermore, 20 families highlighted the personal growth and independence of the individual who underwent the training, while 14 families recognized an increase in social respect for having a trained professional within the household.

Looking to the future, 25 families expressed hope that their child would achieve higher education and skills, signalling a desire for continuous personal and professional growth. 15 families hoped their children would become independent, while 9 families wished for them to build a visionary future in their chosen careers. However, 6 families were content with their child continuing in the same job and saw no need for change. Additionally, 2 families hoped their children would contribute to society through their skills, and 2 others wished for their children to gain respect and recognition in their fields.

The salary earned by the AOPs has had varying levels of impact on the financial burdens faced by families. For 18 participants, the programme significantly reduced the financial burden, providing substantial relief to their financial situation. Another 12 participants experienced partial financial relief, meaning it alleviated some pressure but did not fully resolve all financial challenges. 5 participants indicated that the scholarship enabled education and career growth, suggesting that it allowed for further educational or professional development. For 3 families, the scholarship served as critical support during hard times, providing essential assistance when financial conditions were tough. One participant described the scholarship as highly supportive and beneficial, highlighting its positive impact. However, 5 participants felt that the scholarship had minimal or no impact, meaning it did not substantially affect their financial or personal situation.

The student's participation in the programme has had a notable impact on the community. 21 participants reported that it improved their family's reputation, enhancing their standing within their social circle. A larger group, 28 participants, noted enhanced community recognition, with the student's involvement raising the community's profile. There were 4 cases where the programme led to positive financial changes, while 6 individuals mentioned lifestyle improvements due to the training. Additionally, 5 participants indicated that the programme served as encouragement for others in the community to pursue similar opportunities. However, 4 participants felt there were minimal or no changes in their community due to the student's involvement in the programme.

Regarding the community's response to the student's involvement, the reaction has been generally positive. 15 individuals got a positive community response to the student's training, with 12 people highlighting the respect and recognition the student received. 9 respondents expressed pride and appreciation for the student's achievements, and 7 people noticed an increased interest in the programme in community due to the student's participation. However, 3 individuals reported no specific response from the community regarding the student's involvement.

Employers and training institutions

Based on the responses provided by seven current employers who recruited trainees under the programme, several key outcomes and trends emerge:

Skill proficiency and work quality

Employees trained under the programme are recognized for their professionalism, accuracy, and work ethics. Most employers highlighted that these trained technicians came with good exposure, handling tasks with perfection and demonstrating high skill sets. Skills such as patient communication, time management, disease recognition, and patient referral were frequently mentioned as being well-developed.

Impact on workplace dynamics

The presence of trained employees positively influenced the workplace environment. Many employers noticed improvements in team productivity and an increase in caseload management, as well as an overall positive change in work culture. Trained employees were seen to improve the speed, accuracy, and efficiency of services, contributing to patient satisfaction and hospital reputation.

Training alignment with job requirements

The feedback from employers suggests that the skills acquired by the trainees align well with the demands of the job. Most employers felt that the training provided the necessary tools for the technicians to perform at a high level. These employees were able to adapt quickly and operate with the same level of competence as experienced candidates.

Challenges faced and employer support

Challenges mentioned by employers included patient load, language barriers, and transportation issues in rural areas. Despite these challenges, employers noted that the technicians managed well, and that senior staff and doctors provided continuous guidance. To help overcome these hurdles, employers offered additional training, including exposure to advanced tools and techniques.

Employee recognition and career growth

Most employers have a clear recognition system in place, where good performance is acknowledged either through employee of the month awards, certificates, or even promotions. Many organizations promote employees based on their performance and commitment to the organization, ensuring they have opportunities for career growth. Employers see long-term potential for these employees within their organizations.

Loyalty and commitment

Employers consistently observed strong loyalty and commitment from employees trained through the programme. The technicians exhibited dedication to their roles, fostering team integrity and contributing to the organization's goals. Many employers felt that the training background played a significant role in cultivating this sense of responsibility and professionalism. The data gathered from 7 employers and 4 training institutions involved in the programme reveals several key insights regarding the impact, challenges, and outcomes of the training for AOPs.

Training design and delivery

Institutions have well-structured curricula and training methods. Some partners have incorporated monthly evaluations, continuous assessments, and practical tasks to gauge the progress of students. The training is designed to equip students with the necessary skills in ophthalmology, such as patient screening, clinical procedures, and communication. The curriculum has been continuously updated, reflecting evolving industry needs.

Community impact

Many institutions highlight the community outreach aspect, with students actively participating in eye screening programmes and awareness campaigns. The community engagement of these hospitals has significantly increased due to their involvement in the programme, contributing to a greater local impact. Employment rates post-completion of the training is generally high, with many institutions reporting a good retention rate. However, challenges such as dropout rates and student placement in their local communities were noted by some institutions. One hospital mentioned challenges in retaining students from marginalized backgrounds but reported that after some time, they are placed in their local communities.

Challenges and areas for improvement

Some of the recurring challenges highlighted by employers included dropout rates, lack of instruments for hands-on training, and the need for better student accommodation. Suggestions for improvement include providing more dedicated manpower for reporting, better

accommodation facilities, and enhanced practical training opportunities to further improve the efficiency of the training programme.

Overall satisfaction and future recommendations

Overall, there is a high level of satisfaction with the programme. Employers noted that the programme has not only enhanced training outcomes but also contributed positively to their organizational growth and reputation. Institutions recommended continued support for student accommodation and more focus on the practical training aspect of the programme to ensure better preparation for employment.

DISCUSSION

The training programme provided a positive experience, particularly due to the well-maintained infrastructure and facilities, including the lecture hall, library, and hostel. The use of information technology for teaching and modern digital classrooms further enhanced the learning process. Many trainees reported that the programme helped them grow both personally and professionally, equipping them with essential skills such as communication, screening, counselling, and patient care. Technical expertise, including refraction, slit-lamp examination, and understanding of common eye diseases, was a key part of the curriculum. Moreover, the programme enabled trainees to secure jobs after completion, significantly contributing to their career development and financial independence. Some also mentioned the positive impact of community work, vision screenings, and handling equipment like retinoscopes and lensometers, which added practical value to their training. Several trainees expressed that their experience shaped their confidence, and they felt better prepared to manage patient care, conduct eye health assessments, and work in various eye care sectors. The training had a transformative effect on personal and professional development.

It helped individuals gain confidence and independence, enabling them to work independently, travel alone, and live on their own in a big city. The programme also enhanced their communication skills, allowing them to express themselves more effectively. Personal traits such as responsibility and work-life balance were strengthened, along with improved financial management. For some, learning English and other languages opened doors to interacting with a broader community. As a result, many participants experienced increased self-respect and earned greater admiration from their families and communities. This was especially true for those from rural or lower-income backgrounds who felt proud to contribute to their family's financial stability.

On the professional front, the training provided valuable technical skills in eye examination, such as eye refraction, disease management, and patient communication, making

participants ready for various roles in the eye care sector. Job security followed for many, who secured positions that enabled them to financially support themselves and their families. For individuals from small villages or disadvantaged areas, this was a dream come true. Moreover, the training helped shape career aspirations, with some participants even contemplating starting their own optical businesses or working with family members in the same field. The financial independence gained through the programme had a significant impact, improving the quality of life for many and allowing them to uplift their families' financial standing. Looking ahead, some participants were motivated to pursue further education, such as obtaining a B.Sc. degree, or aimed to enhance their careers by acquiring additional certifications or skills, further solidifying their career goals and aspirations. The responses regarding challenges in retaining employment in the vision care sector and suggestions for improving the training programme varied, but some common themes emerged. Many individuals reported no significant challenges, while a few mentioned issues such as low salaries, competition, work pressure, and long working hours. Some also noted the challenge of having to leave their jobs due to marriage. A few participants mentioned the pressure from seniors to do more work or the long distance from home, particularly in rural areas.

As for recommendations to improve the training programme, there were several suggestions. Some individuals proposed extending the training duration, particularly for the practical component, to ensure better preparation. Suggestions included making the course two years (only theory) long and adding English language classes to enhance communication skills. A few also recommended trainings closer to participants' native places, offering hostel facilities, or improving the affordability of study materials and fees. Some felt that more emphasis should be placed on practical demonstrations, including OT procedures, and that community-based outdoor training should be incorporated alongside hospital training.

A few respondents also expressed a desire for more updated knowledge and skills within the programme. The responses regarding the support provided during the training period and the impact on the family's financial situation highlight a strong sense of pride and gratitude. Many respondents mentioned providing financial and emotional support, including paying for expenses, offering encouragement, and ensuring their children had the resources needed for their training. Several expressed deep pride in their child's achievements, particularly their ability to earn independently and contribute to the family financially.

There were frequent mentions of how the training helped trainees become financially independent, with many now supporting their families through their earnings. Some responses indicated that the family's financial situation

improved due to the child's employment, which provided stability and honour to the family. Additionally, a few respondents noted the pride they felt in seeing their children succeed in a field that contributes to the community, especially for those from rural or tribal backgrounds. Establishing formal training programmes is one important strategy to supplying a well-skilled, trained, and qualified ophthalmic workforce. Access to quality eye care and patient services can be met by task-shifting from ophthalmologists to appropriately trained allied ophthalmic personnel. Allied ophthalmic personnel have skills ranging from performing measurements, administering medications, assisting in patient care, and carrying out administrative duties under an ophthalmologist's direct supervision. Increasing the numbers and using certified AOP contributes to increased productivity and efficiency.^{1,2,5} AOPs can help optometrists by allowing them to concentrate on higher-order tasks while AOPs take care of routine tasks, such as preparing patients for surgery and providing first-level care for ocular emergencies. AOPs should be trained to perform specialized tasks like dispensing low vision aids and making ocular prosthesis, which can enhance the efficiency and productivity of eye care teams. Proper execution of 'task-shifting' depends on the competency levels of the AOPs. Standard operating procedures (SOPs) must be drafted with the involvement of AOPs to ensure standardized details of each task.¹⁻⁶

Limitations

The sample size was relatively small and may not be representative of all AOP trainees in India. The use of self-reported data may introduce response bias. Additionally, the cross-sectional design limits causal inference.

CONCLUSION

The AOP intervention has effectively addressed the need for trained AOP across various institutions, contributing significantly to community health initiatives and improving employment prospects for individuals from marginalized backgrounds. However, areas like student retention, hands-on training, and community-based placement remain areas for improvement. Further investment in infrastructure, support for practical training and emphasis on soft skills would further enhance the overall effectiveness of the programme.

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