Role of an ophthalmologist after patient loses vision—are we doing enough?

Dear Editor:

Five years of medical school, 3 years of post-graduation, a couple more for fellowship—that is how most of the ophthalmologists are trained in our country. After a minimum of 10 grueling years, one would think, it is enough! But how much is enough and who decides that? After all these years, when we come across a patient in our clinic who is blind (without light perception), are we doing enough for them?

The thought for this correspondence to you has stemmed from this very important, yet sparingly discussed, the issue at hand. Does an ophthalmologist in his busy clinic have time, or more importantly, enough knowledge to guide a patient without light perception to the next step of treatment? Is he so focused on treating “seeing” patients that he is subconsciously ignoring “blind” patients?

India is home to around 12 million blind people, which accounts for one-third of the world’s total blind population.\(^1\)\(^2\) Disproportionately, we hardly have a handful of places which offer residential and rehabilitation services to blind people, and even a lesser number working towards integrating these people in the society. Of course, a lot of work is being done for patients with low vision,\(^3\)\(^4\) and most of the ophthalmic centers and institutes have a dedicated department for the same. But when it comes to blind people, we need a more robust system to deal with the problem. When we started collecting data and interviewing people for this article, we realized how less the doctors know (leave aside the common man) in terms of gadgets, technology, and rehabilitation centers available to help blind people.

The most commonly discussed and used tool for the blind are assistive technologies based on the sense of body organs. These are specifically useful for patients in the younger age group, who can use these as pre-academic learning tools. Tactile-based assistive technology in form of Braille is one of the most universally used tools, and these days multiple Braille platforms are available in the form of Braille reading materials (BRM), Braille translator software, Braille dot watch, Braille keyboards; all these in addition to the conventional Braille slate and stylus.\(^5\) Of course, availability of these is an issue along with limited books available on BRM, but it is still important for doctors to be aware of these gadgets and offer options to their blind patients, specifically blind children as it helps in their cognitive development.\(^6\)

Technology is the next big thing that can help in the management of these patients. Simplified mobile phone software is commonly available in both android phones (TalkBack application) and Apple products (VoiceOver application). These applications can make phone use convenient for all visually impaired people. Various portable eBook readers are also available in markets, which can record up to 400 books and offer around 15 h of recorded material.\(^7\) Another interesting software is JAWS (Job Access With Speech), which is a computer screen reader program for Microsoft Windows that helps blind users to read the screen with text-to-speech output. It is available in multiple languages such as English, French, Mandarin, and German, but not Hindi. It is licensed software and comes with a cost. Other software like NVDA (Non Visual Desktop Access) is open access, portable screen reader from Microsoft Windows, which is available in 18 different Indian languages.

Finally, ophthalmologists should be informed about residential facilities where the blind can be referred for residence and rehabilitation. Our efforts should be focused on creating a more inclusive environment for these people, and to look at them as burden carriers, instead of a burden on society. Websites like eyeway.org operate a national toll-free number: 1800 53 20469, where a team of counselors at help desks across three locations respond to a variety of queries that are made on a day-to-day basis regarding education and employment opportunities, mobility, assistive technology, and legal rights for the visually impaired. This number can be shared with the patients who are looking for counseling and rehabilitation services. Few organizations in Delhi such as Blind Relief Association (blindrelief.org), National Association for the Blind (nabdeli.in), and Silver Linings (silver-linings.org) offer residential facilities along with vocational courses for the blind people. Table 1 discusses a list of various organizations working in Delhi for patients with different types of disabilities, and Table 2 discusses a list of organizations working for patients with visual disabilities in other parts of
### Table 1: List of various organizations working in Delhi for people with different types of disabilities

| Name and address of organization | Contact person | Contact Nos. | E-mail ID | Target group | Area of work |
|----------------------------------|----------------|--------------|-----------|--------------|--------------|
| Institutes for the Visually Impaired<br>National Association for Blind<br>Sector - 5, R.K. Puram,<br>New Delhi - 22 | Mrs. Banerjee (Psychologist) | 26120944, 26176379, 26175886 | info@nabdelhi.in | Visually Impaired | School/Training Centre |
| Institute for Blind<br>Amar Colony,<br>B.O.: Lajpat Nagar - IV,<br>New Delhi - 24<br>H.O.: Panchkulan Road,<br>New Delhi - 01 | Mr. M.C. Garg (Office Secretary) | 26411915, 26216506, 23364625 | ifblindschool@gmail.com, ifbandhvidyalaya@yahoo.co.in | Visually Impaired | School/Vocational Rehabilitation Centre for the Handicapped<br>Centre/Training/College/Hospital |
| Rashtriya Vrijanand & Kanya Senior Secondary School<br>New Rajinder Nagar, Shankar Road,<br>New Delhi - 60 | Mrs. Shashi (Superintendent cum C.T.) | 25746002, 25781370 |  | Visually Impaired | Girls School |
| Vocational Rehabilitation Centre for the Handicapped<br>V.R.C. Plot No. 9, 10, 11, Karkardooma,<br>Vikas Marg,<br>Delhi - 110092 | Martin Ashish | 22372704, 22378234, 22378235 | delhivrc@yahoo.com | Employment Exchange | All Disability |
| Action for Ability Development & Inclusion (AADI)<br>2, Balbir Saxena Marg,<br>Hauz Khas,<br>New Delhi - 110016 |  | 26966331, 26966714, 26883002 (f) | aadi@aadi-india.org | Intellectual Disability | Intellectual disability |
| Saksham<br>486, Double Storey,<br>New Rajender Nagar,<br>New Delhi -60 | MS. Rammy Seth | 42411015, 4579601, 26162707, 9810043626 | info@saksham.org | Sale of aids appliances | All Disability |
| Association for Rehabilitation under National Trust Initiative of Marketing (ARUNIM)<br>16-B, Bada Bazaar Road,<br>Old Rajender Nagar,<br>New Delhi -60 |  | 25752423, 9968502182 | marketing@arunim.in, arunim2008@gmail.com | Marketing of products | Intellectual disability and other disability |
| Pandit Deendayal Upadhyaya Institute for the Physical Handicapped<br>4 Vishnu Digambar Marg,<br>New Delhi- 02 |  | 23232403, 23239690 (F) | diriph@nic.in | Orthopedically Handicapped Centre/Training/College/Hospital | Orthopedically handicapped |
| Ali Yavar Jung Rashtriya Shrawan Viklang Sansthan<br>Northern Regional Center (NRC) of<br>AYJNIHH<br>NIMH Building, Plot No. 44-A, Block -C,<br>Sector -40, Gautam Budh Nagar,<br>Noida -201 303 |  | 08527696052 | adnrcniih@nic.in, ayjnihnrnrc@gmail.com, admnrcniih@nic.in | Hearing Impaired Centre/Training/Hospital | Hearing impairment |
| National Handicapped Finance & Development Corporation<br>Red Cross Bhawan,<br>Sector - 12, Sector - 12<br>Faridabad - 07 |  | 0129- 2287512, 2287513, 2226910, 2284371 (F) | nhfcd97@gmail.com | Loan Facility | All Disability |

India. These lists are by no means exhaustive and we are sure that there may be several more working in this field, but the idea of sharing this is to make ophthalmologists aware of some of the referral points available in their respective areas.

Attitude must be changed in this regard and currently work is being done to add topics like “what happens when disability sets in” in the M.B.B.S. curriculum to sensitize medical students. Similar workshops should be arranged for ophthalmology residents and fellows to make them visit rehabilitation centers and orient them to these facilities. Also, sessions should be organized in various national conferences where speakers from various rehabilitation centers and NGOs should be invited to speak and share their experiences with the attending ophthalmologists.

We believe an ophthalmologists’ role should not be confined to merely handing out “disability certificates” to patients.
| Name of the institution                                | Address                                                      | Contact number | Email ID                           | Programs and activities                                                                 |
|--------------------------------------------------------|--------------------------------------------------------------|----------------|------------------------------------|-----------------------------------------------------------------------------------------|
| Blind People's Association (BPA)                       | Jagdish Patel Chowk, 132 Ring road, Surdas Marg Ahmedabad, Gujarat | 7926305082     | cbrrollout@gmail.com               | Education, Rehabilitation, Livelihood, Healthcare, Microfinance                           |
| Samarthanam Trust for the Disabled                     | 11 villa Suchita, 1st Cross, J.P. Nagar, 2nd Phase Bangalore | 9449864770     | support@samarthanam.org            | Education, Environment, Livelihood, Health and Nutrition, Sports and Community based programs |
| National Association for the Blind                     | Valsad District branch - Civil Hospital Road, Gujarat        | 990906502      | nabValsad@gmail.com                | Computer Training, Music, Advocacy activities, Blind Cricket, Braille Training, Dandiya   |
| SMT M.K. Mehta School for the Blind                    | Dairy Road, District - Banas Kantha, Gujarat                 | 9427036855     | mamtamanidir@vidyamandir.org       | Education and Rehabilitation, Vocational Training                                         |
| Louis Braille Memorial School for Sightless girls      | Roop Nagar, Jammu - 180013                                   | 9419286009     | nfbJammu@gmail.com                 | Education (from 1st to 7th standard), Advocacy initiatives, Rehabilitation               |
| JSB Free Residential School for the blind              | Archakara Halli, Ramanagar, Bangalore Karnata               | 080-27272860   | isbsfb@gmail.com                   | Education (from 1st to 10th Standard), Rehabilitation, Vocational Training, Sports and Extracurricular activities |
| National Association for the Blind                     | Central Park, K.C. road, NIT Faridabad, Haryana             | 0129-4319232   | nab80fbd@yahoo.co.in               | Music learning, Computer Training, Vocational Training, Typing cum shorthand program, Home Science Training program |
| Devnar School for the Blind                            | 1-10-125 Mayur Marg, Begumpet Hyderabad, Andhra Pradesh      | 040-66175696   | bujimanager@gmail.com              | Education, Rehabilitation, Computer Training, Sports (Cricket)                          |
| H.P.I.C.S.A (Himachal Pradesh Institute for Children with Special Ability) | Sunder Nagar, Near Maha Maya mandir District - Mandi, Himachal Pradesh | 8544793997     | manjuandi74@gmail.com              | Education, Rehabilitation and Vocational Training                                         |
| Blind Person Association                               | Ward-11, Near Govt. Polytechnic College, Baru, Hamirpur, Himachal Pradesh | 9418185866     | kantpoly@gmail.com                 | Education, Rehabilitation, Marriages, and Vocational Training                           |
| National Federation of the blind                       | Near Holy heaven School, Kamlanagar, Shimla                  | 7018754062     | anil.sharma.jee@gmail.com          | Education, Rehabilitation and Vocational Training                                         |
| St. Micheal School for the blind                       | Post Office Box 1 Ranchi, Jharkhand Old H.B. road Bahu Bazaar | 0651-2351782   | smsbrauchija@gmail.com             | Education (Pre Primary to Senior Secondary), Rehabilitation and Vocational Training     |
| Lakshya for Differently Able                          | Chandini Chowk, Hatia Ranchi, Jharkhand                      | 9576430443     | lakshyafordifferentlyable@gmail.com | Education, Rehabilitation and Vocational Training                                         |
| Shree Ramana Maharishi Academy for the blind           | CA-1B Cross, 3rd J P, 3rd Phase, J. P. Nagar, Bengaluru, Karnataka | 080-26581076   | mail@srmab.org.in                 | Education, Rehabilitation, Human Resource Development, Curricular activities (dance, music, yoga) and Vocational Training |
| Karnataka Federation for the blind                     | Kampanhakalli, Chikkanaguru, Karnataka                       | 9343173402     | asbckfb@gmail.com                  | Education, Rehabilitation and Vocational Training                                         |
| Society for Rehabilitation of the Visually Challenged | 5th floor, South Square Building, Near South Overbridge, Kerela | 9447357864     | sunil@visuallychallenged.com      | Education, Rehabilitation, Music, Sports (Football and Cricket) and Vocational Training  |
| All India Andh Stri Hitt Association                   | 50/236 Vijaya Deep CHS, Gandhi Nagar Bandra (East) Mumbai    | 9821584436     | aiashaworld@gmail.com             | Education, Rehabilitation, Adventurous sports, swimming, yoga, and Vocational Training   |

Contd...
| Name of the institution | Address | Contact number | Email ID | Programs and activities |
|-------------------------|---------|----------------|----------|-------------------------|
| Maharashtra blind and Para Judo Association | 16/265 Vishram Wadi, Sion Road, Mumbai | 9819816340 | parangnagda@yahoo.com | Education, Rehabilitation, Judo, and Vocational Training |
| Blind Persons Association | 124/127 Rustom Alpaiwala Complex, Cotton Depot, Near Reay Road Railway Station, Cotton Green, Mumbai | 022-2375 8680 | 1947.bpa@gmail.com | Educational assistance, Help the Aged Scheme, Need-based Financial Assistance, Medical Assistance, Recreational and Cultural Programs |
| MP Welfare Association for the blind | 33 B/D, Near Indore Wire, Kila Maidan, Indore, Madhya Pradesh | 0731-2410296 | mpwab@yahoo.com | Education, Rehabilitation, Physiotherapy, Advocacy, Deaf-Blind Unit |
| Welfare Association for the blind | Manipur, SAZ road Takyal, Imphal West District | 9612597519 | wab80manipur@gmail.com | Education, Rehabilitation, Sports (Cricket) and Vocational Training |
| Samaritans Association for the blind | Durtlang Vengai Thuampui Selesih Road (Near Caravan) Aizawl, Mizoram | 9862784055 | blind_mizoram@rediffmail.com | Education, Rehabilitation and Vocational Training |
| Odisha State Chess Federation of the blind | Plot no. EB/29 Badagarh, Bhubneshwar | 943978517 | oscfb64@gmail.com | Education, Rehabilitation, Chess and Vocational Training |
| Prayas to Ujala Blind Welfare Society for Visually Challenged | Street No. 2 Opposite Govt. College, KKP Road, Punjab | 9988022865 | gsbar988@gmail.com | Education, Rehabilitation and Vocational Training |
| Rajasthan Netraheen Kalyan Sangh | 3780, Gangauri Bazaar, Jaipur, Rajasthan | 0141-2411634 | info@mks.org | Education (up to 12th class), Computer Training, Rehabilitation, Personality development and Vocational Training |
| Navjyoti Viklang Kalyan Evam Punarvas Sansthan | Behind Shiv Mandir Cinema, Hanumangarh, Rajasthan | 9414434076 | bhishmuskoushik@gmail.com | Education (Class 1st to Class 8th), Rehabilitation, Yoga and meditation Center and Vocational Training |
| Integrated Education Implementation Committee Service Centre | 37 Teachers colony, 1st Floor Alagappan Nagar, Madurai, Tamil Nadu | 9842162762 | ieicmadurai@gmail.com | Education, Rehabilitation and Vocational Training |
| Saint Louis institute for the deaf and blind | No. 25 Canal Bank Road, Gandhi Nagar, Adyar, Chennai, Tamil Nadu | 044-2491 0886 | info@stlouisdeafblindiyar.org | Education, Rehabilitation, Drama, Sports, Music and Computer Training |
| All Tripura Blind Committee | U.K. Stadium, Agartala Office Lane, West Tripura | 9774830577 | 1989atbc@gmail.com | Education, Rehabilitation, Sports (Cricket) and Vocational Training |
| Model School for Visually Handicapped | 116 - Rajpur Road, Dehradun, Uttarakhand | 0135-2744491 | msrh@nivh.org.in | Education (CBSE pattern including Humanities in Class 11th and 12th), Rehabilitation and Computer Training (from Class 3), Sports (Yoga and Judo Karate), Co-curricular activities (Music, dance, drama) |
| Ahmadi School for the blind | Aligarh Muslim University, Aligarh, Uttar Pradesh | 9410692868 | asvemail@rediffmail.com | Education (CBSE), Rehabilitation, Computer Training, and Vocational Training, Weaving, Knitting, Stitching, NFP-classes |
Table 2: Contd...

| Name of the institution                             | Address                                           | Contact number | Email ID             | Programs and activities                                      |
|---------------------------------------------------|---------------------------------------------------|----------------|----------------------|--------------------------------------------------------------|
| Blind Judo Association                            | VPG-16 Ramganga Vihar, MDA Colony, Moradabad, UP | 9415001613     | rajujudo@hotmail.com | Education, Rehabilitation, Judo, and Vocational Training    |
| Voice of World                                     | 4 Nrisingha Dutta Road, Dutta Para, Barisha, Kolkata, West Bengal | 033-25333204   | voiceofworld@gmail.com | Education, Rehabilitation, Sports, Co-curricular activities and Vocational Training |
| Visually Impaired Cricket Association of Bengal    | Sri Guru Ashram, Jagannathpur Road, Behala, Kolkata | 9883767067     | chandanmaityrk@gmail.com | Education, Rehabilitation, Blind Cricket, Sports and Vocational Training |
| Shubham                                           | Fardogharr Rewa road, Muzaffarpur, Bihar           | 9431239841     | shubhammuzengo@gmail.com | Education, Rehabilitation and Vocational Training            |
| National Association for the Blind, Chandigarh and Punjab state branch | Karuna Sadan, Sector 11-B Chandigarh              | 9872735588     | nabchd@yahoo.co.in   | Education, Rehabilitation, Awareness Generation Programmes, Blindness Prevention, and Vocational Training |

without light perception but should be of a counselor giving hope and information to the patient about the next steps of treatment and social rehabilitation.

Once we are able to integrate blind people in mainstream work as human resources and use their skills for the betterment of society that is when we would have done enough!

Acknowledgements

We would like to thank Ms. Preeti Monga (Silver Linings), Mr. George Abraham (Score Foundation) for their time, ideas, discussions, and inputs. Special mention of Mr. David Absalom (Blind Relief Association) for sharing the list of NGOs with us and for the tour of the BRA.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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