

ORIGINAL RESEARCH ARTICLE

pISSN 0976 3325 eISSN 2229 6816 Open Access Article (CC BY-SA) www.njcmindia.org DOI: 10.55489/njcm1322022158

Level of Independence and the Mental Status of the Visually Challenged High School Students in Chennai

Shanthi Edward¹, Vijaykumar Edward², Kritika V³

¹Professor, Department of Community Medicine, Sree Balaji Medical College and Hospital, Chennai ²Assistant Professor, Department of General Medicine, Sree Balaji Medical College and Hospital, Chennai ³MBBS student, Department of Community Medicine, Sree Balaji Medical College and Hospital, Chennai

ABSTRACT

Background: The purpose of this study is to measure the number of visually impaired students who are capable of doing and managing their own work and also to evaluate their state of mind due to their impairment. The study is also to bring awareness about the rehabilitation centres and special training on mobility for the children.

Objective: To find out the level of independence and the mental status of visually challenged students.

Methods: This is a descriptive cross-sectional study. Sixty visually impaired students were included in the study by random sampling method. Male students from class 9th to 12th standard were evaluated. Data relevant to the study are gathered by interview schedule method and questionnaire was designed for the study beforehand.

Result: It is evident from the current study that 83.3% of the impaired have not been trained to walk independently. Almost 78.3% of the students are not even aware of the rehabilitation centres. However, about 98.3% of students are independent in grooming and washing & also taking care of their personal work. As per the survey, only 26.6 % of students are feeling isolated, whereas, the balance 73.4% students feel very comfortable while dealing with sighted students. About 96.6% feel very happy and satisfied as they get enough support from their parents.

Key words: Managing, Rehabilitation Centres Social Support, Mobility, Awareness

INTRODUCTION

Visually challenged people are those who face challenges associated with vision.

At present, according to WHO, the uniform criterion and the definition of blindness is "Visual Acuity of Less Than 3/60 (Snellen) Or Its Equivalent. Globally it is estimated that approximately 1.3 billion people suffer from distant and near visual impairment and 36 million people are blind. Non correctable visual impairment was associated with reduced functional status and well-being, with a magnitude comparable to major medical conditions. 11 Its impact was stronger on mental than physical domains.12 Visual impairment is associated with psychosocial

conditions including social isolation, cognitive impairment, increased dependency on others, poor selfrated health, and depression.9 Limitations in mobility, activities of daily living, and physical performance were associated with worse visual function.¹⁰ Some of the major challenges include difficulty in moving from one place to another without the assistance of someone. Other challenges include difficulty in recognising people, detecting obstacles.²⁰ Orientation, mobility and independence training supports children's development from early childhood, enabling blind and partially sighted children to play an active part in school, home and social environments with their sighted peers.²

How to cite this article: Edward S, Edward V, Kritika V. Level of Independence and the Mental Status of the Visually Challenged High School Students in Chennai. Natl J Community Med 2022;13(2):100-103. DOI: 10.55489/njcm1322022158

Financial Support: None declared Conflict of Interest: None declared

Date of Submission: 13-10-2021 Date of Acceptance: 25-01-2022 Date of Publication: 28-02-2022

Correspondence: Dr. Shanthi Edward (Email: edwardshanthi56@gmail.com)

Copy Right: The Journal retains the copyrights of this article. However, reproduction is permissible with due acknowledgement of the source.

www.njcmindia.org Edward S et al

This can be achieved by rehabilitation centres. Rehabilitation centres are not only for orienting the students to their surrounding or training them to walk independently, they can also train the parents and teachers as their role in the student's life are vital. The parents' behaviour affects development of a sense of security in a child which in turn affects later learning.³

Mental Status: Loneliness is best understood as a psychological state in which a person feels a lack of meaningful connectedness to other people; whereas social isolation can be observed when a person lacks opportunities for social contact. Hence the student's mental health is always not stable.

People with sight loss are more likely to experience poor quality relationships than their sighted peers. It has direct negative impact on people's psychological wellbeing and may put them at risk of social isolation and loneliness because of the loss of opportunities for social interaction. Blind children and their families, neighbours, and friends has to interact socially in normal situations.¹⁸

Only relationships and social interaction, social support, friendship support can help the visually challenged students to overcome their loneliness and isolation.

METHODOLOGY

This was a descriptive cross-sectional study. The current study was conducted in a blind school located at Poonamalle in Chennai. The school possess 120 students who were visually challenged. All the students who were available at the time of interview were included in the study and they were 60 male students studying in $\,9^{\rm th}$ to $12^{\rm th}$ standard under the age group of 13-22 years .

The study was done between May, 2019 to June, 2019.

Data collection: It was started after the clearance by ethical committee A structured questionnaire was prepared and data was collected by interview schedule which consisted of socio demographic details, questions on their independence in mobility, ability to do their routine daily activities on their own, taking decisions, on awareness of training and rehabilitation of visually challenged children, questions on their satisfaction of their visually impaired status, questions on their support level from various group of people associated with them, level of concentration in studies, level of acceptance in the family and society, level of happiness of socialisation.

The principal investigator explained the purpose of the study to each participant and a written consent was obtained from the participants prior to the commencement of the study. The participants were also informed that their participation was voluntary and that they could withdraw from the interview at any time without consequences. Every effort was made, to be sure that all information collected from the participants, remain confidential.

Statistical analysis: The current study involved interviews with all participants. Data entry and analysis was done using Statistical Package for Social Sciences 16 version software. Descriptive statistics was done and the results were presented in frequency and percentages.

RESULT

The current cross sectional study was conducted among 60 visually challenged students in a blind school at Chennai. Out of these 60 students, 25% of them had acquired the visual impairment during the normal life and 75% had congenital visual impairment.

Independence level: It is evident from Table: 1, that 98% of students are independent in grooming and washing up themselves. 93.3% students can arrange their own desk, wardrobe and their clothes. 86 % of the students are aware of surrounding. Therefore, the maximum number of students is independent on their personal autonomy However, only 17% students have acquired training on mobility and only 22% are aware of the rehabilitation centres to be more independent.

Table 1: level of Independence

Activity by the participant	Students (%)
Grooming and washing	59 (98)
Managing household activities	56 (93)
Awareness of surrounding	51 (86)
Acquired training for motility	10 (17)
Awareness of Rehabilitation	13 (22)

Table 2 Education on Independence

Education by	Students (%)	
Parents	19 (31)	
Teachers	14 (23)	
Friends	15 (26)	
Self	12 (20)	

Table 3: Mental status and social support

Factors	Students (%)
Felt unhappy	21 (35)
Felt isolated	16 (26.6)
Able to concentrate on studies	54 (90)
Parent support	58 (96.6)
Social support	56 (93)
* *	

Assistance: It was found from Table 2, that 31% of the students have been taught to arrange and manage clothes by their parents, 26.6% by their friends, 23.3% by their teachers, 20 % by themselves.

Assessing their mental status: Table 3 depicts that only 26.6% had felt isolated recently. About 93% received social support. Nearly 97% got enough sup-

www.njcmindia.org Edward S et al

port from their parents and they were very satisfied and happy with the support they received. Only 35% felt unhappy. About 90% of the visually challenged students were able to fully concentrate on their studies and they don't get distracted.

DISCUSSION

The current study found that out of 60 students, 42 students were partially sighted and 18 students were totally visually impaired. When compared between these two, partially sighted students were less dependent than the students with complete blindness. Partially sighted students read from books that are written with standard print or enlarged print or use magnifiers, telescope, whereas students who are totally blind, use braille and tape recorded lectures and books. There are various other new technologies and tools for education but these may not reach the needy persons at appropriate time/place due to less availability, affordability and lack of awareness.

Rehabilitation centre: It is revealed from the current study that only 22% of the visually impaired students are aware of the rehabilitation centres available around them. Rehabilitation Centres for the Blind actually are re-conditioning or re-orienting Centres where blind people may go to have some of their fundamental concepts about blindness clarified, and their thoughts and opinions about a sighted world better organized.8 Rehabilitation services are measured by improved quality of life.¹⁴ These centres mainly provide a wide range of professional services, various vocational training such as weaving, furniture caning, book-binding and making bags, doormats, candles, chalk, phenyl and liquid soap etc. It will improve the confidence and independence of the visually impaired.4

In the centre, they are taught about an obstacle approaching them. After much experience the person can walk alone to that place. They are also taught about sound-producing sources. Recognizing sources of sound will help them cross a street, where it is essential to know positioning machine is in motion.⁴ But most of the blind had no access to formal education or rehabilitation system, which may have contributed to their maladjustment in the domains identified.¹³ The awareness about these centres is less. Though many programmes have been launched, it hasn't reached many people. The rehabilitation centres train parents and teachers to manage their visually impaired child.

Parental & teachers support: In the current study, 96% of the visually challenged students are satisfied with the support they received from parents and 93% received social support from family and friends. Their parents assist their kids while studying, this deepens the interaction between parents and children and their children show improved self-esteem and self-worth, improved confidence and better behaviour. Their parents monitor and guide their ac-

tivities and help them correct them. Parents/caregivers are more knowledgeable in providing information about the child's capabilities.⁷ They have more opportunities to observe the child in varied settings7.

The orientation and mobility trainer along with the parents need to talk about how they feel certain things (hard, soft, smooth, bumpy, wet, dry), what colour, and as smell (strong, sweet and dangerous). When the child is in new places, parents need to describe how it looks, sounds, feels or smells. Parents must submit the child walking surfaces and their texture (carpet, flooring, tiles, grass, mud or pavement) and set him to make connections between these areas and their location or activities that occur on that surface.⁵

Parents of a visually impaired child are responsible for meeting the basic needs of the child such as learning daily living skills - sitting, walking, dressing, eating, etc. A child learns to speak and move within the house and neighbourhood. Parents are also required to give the psychological back up apart from giving food, shelter, clothing and social security. The rehabilitation centres should train parents and teachers to manage their visually impaired child. They are in need of information, knowledge and skills to manage a visually impaired child and through specific strategies this objective can be achieved successfully.

Social Isolation: Earlier the visually challenged people suffered from isolation. They faced difficulties with communication and social interaction which contributed to the feeling of being socially isolated. They suffered from various behavioural and emotional problems like depression, anxiety and anger.5 Earlier mood disorders was a major problem faced by the visually impaired but now they have overcome their mood disorders such depression, anxiety, anger, loneliness, social isolation and all their emotional problems.6 From the current study it was found that only 35% of the students were unhappy and only 26% of them felt they were lonely. In the current study, it was also found that 90% of the visually challenged students had good concentration in their studies. This shows that currently the visually challenged students become mentally stable and have overcome their emotional problems, and the percentage of the emotional problems faced by the students have come down due to social support that the parents and society provide.

CONCLUSION

Following statistical analysis and interpretation of experimental data it could be concluded by stating that students have become more independent in their personal autonomy like activities of daily living, personal care and grooming, home management, Braille and studies but are less dependent in orientation and mobility. They are also not aware of the re-

www.njcmindia.org Edward S et al

habilitation centres which can improve their lifestyle to greater extent. Parental support plays a major role in grooming the blind children and motivates them to be like normal child, Friendship, social interaction, parents support and independence in mobility are important to promote good mental health in all the children. Finally the government should establish more rehabilitation centres and provide good training to the students and also to provide priority in employment opportunities and psychologists so that they have very healthy and peaceful life.

ACKNOWLEDGEMENT

My sincere thanks to the principal of ponamalle blind school for permitting me to collect the required data and for completing the study. I also thank them whose names have not been mentioned but have stood to my cause, rendered me unconceivable help at every step of my work.

REFERENCES

- Park K. Park's Textbook of Preventive and Social Medicine, 25th Edition. Jabalpur: Bhanot Publishers;2021. p 430.
- Pavey S, Douglas G, McLinden M, McCall S. An investigation into the mobility and independence needs of children with visual impairment. Part 1: The development of a mobility and independence curriculum framework. British Journal of Visual Impairment. 2003; 21:4-9.
- Fearon RP, Bakermans-Kranenburg MJ, Van IJzendoorn MH, Lapsley AM, Roisman GI. The significance of insecure attachment and disorganization in the development of children's externalizing behavior: a meta-analytic study. Child development. 2010; 81:435-56.
- Borca CV. Effective strategies for developing independence in movement and travel of blind students. Procedia-Social and Behavioral Sciences. 2010; 2:4310-3.
- 5Aciem TM, Mazzotta MJ. Personal and social autonomy of visually impaired people who were assisted by rehabilitation services. Revista Brasileira de Oftalmologia. 2013; 72:261-7.
- Stelmack J. Quality of life of low-vision patients and outcomes of low-vision rehabilitation. Optometry and Vision Science. 2001;78:335-42.
- Antony MS, Bachani D, Murthy GV, Rao GV, Sil AK, Gogate P, Nirmalan PK, Shamanna BR. How to assess and plan for the management of visually challenged children in the context of

- multiple "different-abilities". Community Eye Health Journal. $2007 \, \text{Jun}; 20(62): S92$
- Routh TA. Psychotherapy as used in a rehabilitation centre for the blind. Indian J Soc Work. 1962 Jul;23:173-8.
- Zheng DD, Christ SL, Lam BL, Arheart KL, Galor A, Lee DJ. Increased mortality risk among the visually impaired: the roles of mental well-being and preventive care practices. Investigative ophthalmology & visual science. 2012 May 1;53(6):2685-92
- Salive ME, Guralnik J, Glynn RJ, Christen W, Wallace RB, Ostfeld AM. Association of visual impairment with mobility and physical function. Journal of the American Geriatrics Society. 1994 Mar;42(3):287-92.
- 11. Chia EM, Wang JJ, Rochtchina E, Smith W, Cumming RR, Mitchell P. Impact of bilateral visual impairment on health-related quality of life: the Blue Mountains Eye Study. Investigative ophthalmology & visual science. 2004 Jan 1;45(1):71-6.
- 12. Chia E, Mitchell P, Smith W, Rochtchina E, Wang J. Visual Impairment and Health-Related Quality of Life: The Blue Mountains Eye Study. Investigative Ophthalmology & Visual Science. 2003 May 1;44(13):984-.
- Tunde-Ayinmode MF, Akande TM, Ademola-Popoola DS. Psychologica and social adjustment to blindness: Understanding from two groups of blind people in Ilorin, Nigeria. Annals of African medicine. 2011;10(2).
- Sarabandi A, Mobaraki H, Kamali M, Chabok A, Soltani S. The effect of rehabilitation Services on quality of life for the blind. Modern Rehabilitation. 2014 Jan 1;7(4).
- 15. Rokach A, Berman D, Rose A. Loneliness of the Blind and the Visually Impaired. Frontiers in psychology. 2021;12.
- 16. McLinden M, Douglas G, Cobb R, Hewett R, Ravenscroft J. 'Access to learning'and 'learning to access': Analysing the distinctive role of specialist teachers of children and young people with vision impairments in facilitating curriculum access through an ecological systems theory. British Journal of Visual Impairment. 2016 May;34(2):177-95.
- Tuttle DW. The role of the special education teacher-counselor in meeting students' self-esteem needs. Journal of Visual Impairment & Blindness. 1987 Apr;81(4):156-61.
- 18. Mani MN. The role of integrated education for blind children. Community Eye Health. 1998;11(27):41.
- 19. Kher Chaitrali S, Dabhade Yogita A, Kadam Snehal K, Dhamdhere Swati D, Deshpande Aarti V. An intelligent walking stick for the blind. International Journal of Engineering Research and General Science. 2015 Jan;3(1):1057-62.
- Paul IJ, Sasirekha S, Mohanavalli S, Jayashree C, Priya PM, Monika K. Smart Eye for Visually Impaired-An aid to help the blind people. In2019 International Conference on Computational Intelligence in Data Science (ICCIDS) 2019 Feb 21 (pp. 1-5). IEEE.