



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

International Journal of Current Research
Vol. 11, Issue, 10, pp.7817-7819, October, 2019

DOI: <https://doi.org/10.24941/ijcr.37017.10.2019>

INTERNATIONAL JOURNAL
OF CURRENT RESEARCH

REVIEW ARTICLE

VISUAL OUTCOME PERCEPTIONS AMONG POST-CATARACT SURGERY PATIENTS IN RURAL AREAS OF KANCHIPURAM DISTRICT, TAMIL NADU

Dr. Amod Hansdak¹, Dr. Bhuvaneshwary^{2,*}, Mr. Vincent², Dr. Newtonraj², Dr. Manikandan², Dr. Joy Bazroy² and Dr. Anil J Purty²

¹Department of Ophthalmology, Pondicherry Institute of Medical Sciences, Puducherry

²Department of Community Medicine, Pondicherry Institute of Medical Sciences, Puducherry

ARTICLE INFO

Article History:

Received 04th July, 2019
Received in revised form
28th August, 2019
Accepted 05th September, 2019
Published online 30th October, 2019

Key Words:

Post-Cataract Surgery,
Daily Activity,
Visual Impairment.

ABSTRACT

Background of the study: An estimated 253 million people live with vision impairment: 36 million are blind and 217 million have moderate to severe vision impairment in the World. ⁽¹⁾ Around 81% of people who are blind or have moderate or severe vision impairment are aged 50 years and above. **Methodology:** The survey was conducted in rural villages of Kanchipuram district in the service areas of Chunampet Rural health training centre. Post-cataract surgery operated individuals were interviewed to assess the functional ability in performing the common daily-activities. **Results:** A total of 100 post-cataract surgery operated individuals were interviewed of which 59% were females and 41% were males. Most of the study participants were farmers by occupation. Unilateral cataract is the most common cause of visual impairment among the study participants. The majority of the study participants were able to perform their common daily activities by themselves without any hindrance. **Conclusion:** The burden of performing cataract surgery in rural areas and unreached, remote communities still remains a challenge for health planning and health service providers. Health manpower development and services to meet these growing needs remains a future necessity.

Copyright © 2019, Amod Hansdak et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Dr. Amod Hansdak, Dr. Bhuvaneshwary Mr. Vincent, Dr. Newtonraj, Dr. Manikandan, Dr. Joy Bazroy and Dr. Anil J Purty. 2019. "Visual outcome perceptions among post-cataract surgery patients in rural areas of Kanchipuram district, Tamil Nadu", *International Journal of Current Research*, 11, (10), 7817-7819.

INTRODUCTION

Globally the transition from infectious diseases to non communicable diseases has already taken place in most countries around the world which calls for modification of strategies by all stakeholders involved in providing healthcare to various segments of the society. An estimated 253 million people live with vision impairment: 36 million are blind and 217 million have moderate to severe vision impairment in the World (<http://www.who.int/blindness/en/>). Around 81% of people who are blind or have moderate or severe vision impairment are aged 50 years and above. Globally, chronic eye diseases are the main cause of vision loss. Uncorrected refractive errors and then un-operated cataract are the top two causes of vision impairment. Un-operated cataract remains the leading cause of blindness in low- and middle-income countries. The Universal eye health: a global action plan 2014-2019, approved by the World Health Assembly in 2013, has the aim of achieving a measurable reduction of 25% of avoidable visual impairments by 2019 (1).

Statement of the problem: A study to assess the Visual outcome perceptions among post-cataract surgery patients in rural areas of Kanchipuram district, Tamil Nadu.

Objectives

- To study socio demographic characteristics of post cataract surgery operated patients.
- To assess the ability to perform common daily activities after cataract surgery.

MATERIALS AND METHODS

Research approach— quantitative, Research design- Non experimental descriptive study, Setting- rural villages of kanchipuram district, Population- post cataract operated individuals, Sampling technique-Purposive sampling, Sample size-n=100, tool- pre-designed questionnaire.

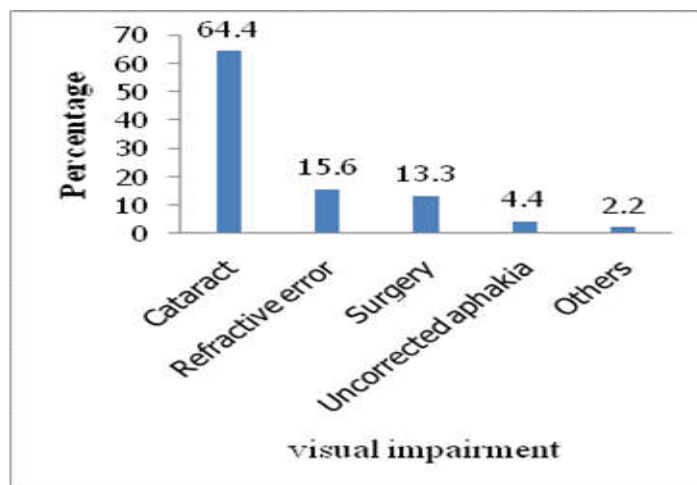
RESULTS

A total of 100 participants who had already undergone cataract surgery were interviewed during the survey of which 45% (45) were males and 55% (55) were females as seen in Table-1.

*Corresponding author: Dr. Bhuvaneshwary,
Department of Community Medicine, Pondicherry Institute of Medical Sciences, Puducherry.

Table 1. Performance of daily activities among the study participants (n=100)

S.No	Daily activity	Total Percentage
1	During the past 3 months, have you tried to read street signs at night either when driving or when you are a passenger in a car?	49
2	During the past 3 months, have you prepared meals?	49
3	Can you read numbers on the television screen?	53
4	During the past 3 months, have you tried to read street signs in daylight?	58
5	During the past 3 months, have you tried to walk down steps without handrails or help in dim light (or at dusk)?	60
6	During the past 3 months, have you tried to walk down steps without handrails or help during the daylight?	66
7	During the past 3 months, have you used public transportation?	72
8	During the past 3 months, on a bright sunny day, can you see peoples' faces from across the street?	74
9	During the past 3 months, have you watched television?	81

**Figure 1. Perceptions of visual impairment of the study participants (n=55)**

Visual impairment was more common among the females 52.5% (31) as compared to males 34.1% (14) who had lesser numbers. The age group 55-64 years had more visual impairment 55.9% (19) followed by those above 65 years of age 42.9% (21) and the least was the age group 45-54 which had 29.4% (5). Almost half of the illiterates 48.6% (34) had visual impairment while 51.4% (36) of the illiterates did not have visual impairment. About three fourths 73.3% (11) of the individuals with primary school education did not have visual impairment in comparison to 26.7% (4) who had visual impairment. Visual impairment among those who were educated upto middle school was 62.5% (5) as compared to 28.6% (2) who had a high school education. With regard to occupation there was more visual impairment among those who were not employed 58.1 % (18) as compared to farmers which had lesser number with visual impairment 37.9% (22). The other occupations had very few in number and therefore need to be treated with caution. Visual impairment and its probable reason as perceived by the study participant was enquired by the health team visiting the individual at his residence who had undergone cataract surgery. More than half 55 % (55) of the study participants complaint of visual impairment as depicted in figure 1. The probable reason for the visual impairment as cited by the study participant is highest for those with cataract in the un-operated eye (64.4%), followed by refractive error (15.6%), poor surgery outcomes (13.3%), uncorrected aphakia (4.4%), etc.

Conclusion

The burden of performing cataract surgery in rural areas and unreached, remote communities still remains a challenge for health planning and health service providers.

Although a sizeable proportion of the middle age and elderly population have received eye screening and middle age and cataract surgery yet their follow-up and surgery outcome in terms of quality of vision and performances of common day to day necessary activities need to be measured. Health manpower development and services to meet these growing needs remains a future necessity.

REFERENCES

- Ammari W, Harrath S, Mbarek S, Mahmoud A, Chebbi W, Messaoud R, Khairallah M. Incidence and causes of visual impairment in the district of Mahdia, in east Tunisia: Retrospective study of 1487 cases. *J F Ophthalmol* 2016 Nov; 39 (9): 771-779.
- Blindness and vision impairment prevention [Internet]. [cited 2018 Jun 6]. Available from: <http://www.who.int/blindness/en/>
- Dandona L, Dandona R, Naduvilath TJ, Mcarty CA, Mandal P, Srinivas M, Nanda A, Rao GN. Population-based assessment of the outcome of cataract surgery in an urban population in southern India. *Am J Ophthalmol*. 1999 Jun; 127 (6): 650-8.
- Gupta SK, Murthy GV, Sharma. Longitudinal study on visual outcome and spectacle use after intracapsular cataract extraction in northern India. *BMC Ophthalmol* 2003 Jul 28; 3:9
- Khanna RC, Pallerla SR, Eeda SS, Gudapati BK, Cassard SD, Rani PK, et al. 2012. Population based outcomes of cataract surgery in three tribal areas of Andhra Pradesh, India: risk factors for poor outcomes. *PLoS One.*, 7 (5):e35701.doi: 10.1371/journal.pone.0035701.

- Mackensen G, Bohn P. How do patients assess their visual acuity after intracapsular cataract extraction and correction with eye glasses. (Article in German). *Klin Monbl Augenheilkd* 1984 Feb ;184 (2) : 84-8.
- Marmamula S, Khanna RC, Shekhar K, Rao GN. Outcomes of Cataract Surgery in Urban and Rural Population in the South Indian State of Andhra Pradesh : Rapid Assessment of Visual Impairment (RAVI) Project. *PLoS One*. 2016;11(12):1–10.
- Murth GV, Gupta SK, Talwar D. 1996. Assessment of cataract surgery in rural India. Visual acuity outcome. *Acta Ophthalmol Scand.*, Feb; 74 (1) : 60-3.
- Murthy GVS, Gupta S, Ellwein LB, et al. A population-based eye survey of older adults in a rural district of Rajasthan: I. Central vision impairment, blindness, and cataract surgery. *Ophthalmology* 2001; 108: 679–85.
- Murthy GV, Ellwein LB, Gupta S, Tanikachalam K, Ray M, Dada VK. 2001. A population-based eye survey of older adults in aruraldistrict of Rajasthan: II. Outcomes of cataract surgery. *Ophthalmology*. 2001; 108(4):686-692.
- National Programme for Control of Blindness [Internet]. [cited 2018 Jun 6]. Available from: <http://npcb.nic.in/>
- Newtonraj A, Arun S, Bazroy J, Tovia S. Lay perspectives on causes and complications of hypertension ; and barrier to access health care by known hypertensive patients : a qualitative study from a rural area of South India.
- Nirmalan PK, Thulasiraj RD, Maneksha V, et al A population based eye survey of older adults in Tirunelveli district of south India: blindness, cataract surgery, and visual outcomes *British Journal of Ophthalmology* 2002;86:505-512.
- Oliver JE, Thulasiraj RD, Rahmathullah R, Baburajan, Katz J, Tielsch JM, Schein OD. Vision-specific function and quality of life after cataract extraction in south India. *J Cataract Refract Surg* 1998 Feb; 24 (2) : 222-9.
- Ruggeiro CP, Gloyd S. Evaluation of vision services delivered by a mobile eye clinic in Costa Rica. *Optom Vis Sci* 1995 Apr; 72 (4) : 241-8.
- Thulasiraj RD, Reddy A, Selvaraj S, Munoz SR, Ellwein LB 2002. The Sivaganga eye survey: II. Outcomes of cataract surgery. *Ophthalmic Epidemiology*.2002; 9(5):313-324.
- Vijaya K. Gothwal, Thomas A. Wright , Ecosse L. Lamoureux, and Konrad Pesudovs. Rasch Analysis of the Quality of Life and Vision Function Questionnaire. *Optometry and vision science*. 2009; 86(7): E836–E844
- Vijaya L, George R, A R, et al. Outcomes of cataract surgery in a rural and urban south Indian population. *Indian Journal of Ophthalmology*. 2010;58(3):223-228. doi:10.4103/0301-4738.62648.
- Vincent A, Keerthana K, Dhamotharan K, Newtonraj A, Bazroy J, Manikandan M. Health care seeking behaviour of women during pregnancy in rural south India : a qualitative study. 2017;4(10):3636–9.
