

**TO STUDY THE PREVALENCE OF EYE DISEASES
AND COMMUNITY PREFERENCES FOR SELECTING
EYE HEALTH CARE CENTRES IN BLOCK
PAPPAMPATTI AND PERUR COIMBATORE, TAMIL
NADU**

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TABLE OF CONTENT

- Introduction
- Review Literature
- Research Question and Objectives
- Methodology
- Result
- Discussions
- Recommendation
- Conclusion

INTRODUCTION

- Global Context:
 - Vision: Crucial for world interaction
 - Eye diseases: Major global health concern
- Indian Scenario:
 - High burden of eye diseases
 - Key conditions: Cataract, refractive errors, glaucoma, diabetic retinopathy
 - Early diagnosis and intervention critical
- Challenges:
 - Access barriers: Geographic, economic, social
 - Influence of personal preferences
- Coimbatore Healthcare:
 - Diverse eye care facilities (public, private, non-profit)
 - Wide range of services available
- Study Objectives:
 - Assess eye disease prevalence in Block Pappampatti and Perur
 - Investigate community preferences for eye care centres
 - Goal: Improve vision care access and quality



LITERATURE REVIEW

Sr.	Journal & Date	Title	Author	Salient Feature
1.	Rural and Remote Health (April 2013)	“Prevalence of eye diseases among school children in a rural south-eastern Nigerian community”	Obiekwe Okoye, Rich E Umeh, Felix U Ezepue	A study of 2,092 rural Nigerian schoolchildren found that 6.1% had eye disorders, primarily vernal conjunctivitis and refractive errors. Amblyopia was the main cause of visual impairment. The research highlights the urgent need for early detection and treatment of eye conditions in rural areas. Regular eye exams, health education, and better access to eye care facilities are crucial to prevent lifelong visual impairment in these children. This study underscores the importance of addressing treatable eye conditions in rural Nigerian youth through targeted intervention programs.
2.	PubMed Central (April 2012)	Prevalence of eye diseases and visual impairment among the rural population – a case study of temerloh hospital	T Thevi, M Basri, SC Reddy	A six-month cross-sectional study at a hospital in Temerloh, Pahang, examined 1081 patients to determine the prevalence of eye diseases and visual impairment. The study population was predominantly male (56.1%) and Malay (72.4%), with a mean age of 45.2 years. Cataract was the most common eye condition (22.9%), followed by retinal diseases (11.5%) and ocular trauma (9.8%). Visual impairment affected 8.2% of patients, with 1.1% experiencing severe visual impairment (mostly due to cataracts) and 3.2% classified as blind. Among premature infants screened for retinopathy, 7.9% had inconclusive vision assessments. The study emphasizes the need for enhanced health education and increased availability of eye specialists in district hospitals to facilitate early diagnosis and treatment, which is crucial for rehabilitating visually impaired and blind individuals.

Sr.	Journal & Date	Title	Author	Salient Feature
3.	Calabar Journal of Health Sciences (October 2022)	“Barriers to utilization of an eye care facility in a rural community in South-South Nigeria”	Author Ernest Ikechukwu Ezeh	A cross-sectional survey of 200 participants in a South-South Nigerian village revealed significant barriers to eye care service utilization. Despite a high prevalence of ocular disorders, only 24.1% of respondents had previously sought eye care at the local Comprehensive Health Centre. The primary obstacles were lack of awareness about the eye clinic's existence (47.3%) and schedule (33.0%), as well as a perceived lack of need for eye care (23.2%). These findings highlight a critical gap between the availability of eye care services and their uptake by the community, underscoring the need for improved strategies to increase awareness and utilization of existing eye care facilities in rural Nigeria.
4.	PubMed Central (December 2023)	“Barriers to the uptake of eye health services of the children in rural Bangladesh: A community-based cross-sectional survey”	Author A.H.M. Enayet Hussain, Saidur Rahman Mashereky, Labida Islam, A.K.M. Fazlur Rahman, Eija Viitasara, Koustuv Dalal,	This study aimed to explore the health-seeking behaviors of parents in Bangladesh whose children have ocular problems. It was a cross-sectional mixed-method study conducted in a rural area of Bangladesh. Out of 198 confirmed cases of childhood ocular issues, only 43.9% of parents pursued medical care for their children's eye conditions. Wealthier and more educated families exhibited better health-seeking behaviour. Socio-demographic factors, lack of health education, and financial issues played a vital role in parents' health-seeking behaviour. The major barriers identified were lack of eye health awareness about the disease and its consequences, lack of eye health awareness about children's eye illnesses, and economic constraints. The study highlights the need for comprehensive assessment at the community level for quickly detection of eye illness and the awareness of health care provider about ocular health issues and the importance of early interventions.

Sr.	Journal & Date	Title	Author	Salient Feature
5.	African Vision and Eye Health) (December 2010)	“A review of factors influencing the utilization of eye care services”	Author M.D. Ntsoane, O.A. Oduntan	This study reviews various factors that influence the utilization of eye care services. The primary factors discussed are the availability, accessibility, and affordability of eye care services. Secondary factors include demographic characteristics like age, gender, race, education level, and socioeconomic status. Other factors covered are knowledge of eye diseases and available services, perceived need for eye care, and psychosocial factors such as attitudes, beliefs, and cultural norms. The authors emphasize that identifying these barriers is crucial for eye care providers & policymakers to improve utilization of eye care services, quickly detection of eye conditions, & prevention of visual impairment, especially in underserved communities.
6.	Journal of Positive School Psychology (September 2022)	“A Review of the Determinants that Influence the Use of Eye Care Services”	Gadila Vakula Devi, Byram Anand	The article comprehensively reviews the various determinants that influence the utilization of eye care services across different populations and regions. It highlights how factors like lack of availability and accessibility of services, cost affordability issues, demographic factors (age, gender, education, socioeconomic status), perceptions about need and quality, as well as other socio-cultural barriers like language, lack of social support etc. prevent people from accessing existing eye care facilities, even when reasonably priced services are available. The article emphasizes the need for eye care providers, health systems and policymakers to understand and systematically address these complex barriers through better planning, public awareness, affordable services and coordinated efforts to increase uptake of eye care and tackle preventable vision impairment.

Sr.	Journal & Date	Title	Author	Salient Feature
7.	Community Eye Health Journal (November 2021)	“Strategies to improve delivery of primary eye care in public health care institutions in Sri Lanka”	Author Prabhath Piyasena, Vindya Kumarapeli, Dhanushka Abeygunathilaka	According to the study primary eye care in Sri Lanka, integrated within the public health system, faces challenges despite a robust primary health care framework. The prevalence of blindness and visual disability, primarily due to cataracts and uncorrected refractive errors, highlights the need for enhanced primary eye care services. Government policies endorse universal health coverage, aiming to strengthen primary care through initiatives like the essential services package. Key strategies for improvement include training mid-level eye care personnel, ensuring medical supplies and technology, addressing referral system inefficiencies, and fostering multi-sectoral collaboration and community participation. These efforts aim to reduce disparities and meet the evolving eye health needs of the population effectively.

RESEARCH QUESTIONS AND OBJECTIVES

Research Questions

1. What are the most common eye diseases found in the Pappampatti and Perur blocks?
2. What factors influence the community's choice of eye health care centres?
3. What are the main barriers preventing community members from accessing eye health care services, and what strategies can be implemented to enhance accessibility and quality of eye care based on community preferences?

Objectives of the Study

- To Identify the various types of eye diseases, present within the community.
- To Assess Community Preferences for Eye Health Care Centres:
- Investigate the factors influencing the community's choice of eye health care centres.
- Understand the barriers to accessing eye health care services.
- Suggest strategies to enhance the accessibility and quality of eye care based on community preferences and disease prevalence.

METHODOLOGY

- **Study Design** - Descriptive Cross Sectional Study Design.
- **Study Setting** - In Block Pappampatti And Perur Coimbatore, Tamil Nadu.
- **Study Population** –
 - **Inclusion Criteria:**
 1. **Residence:** Residents who are living in the community for more than Five years. This criterion ensures participants have adequate experience with local eye health care services.
 2. **Eye Health Experience:** Individuals who have visited any eye care centre within the last six months. This ensures the data reflects recent experiences and preferences.
 3. **Willingness to Participate:** Individuals willing to provide informed consent to participate in the survey.
 - **Exclusion Criteria :**
 1. **Non-residents:** Individuals who have lived in the community for less than one year. This excludes those who may not have sufficient experience with local eye health care services.
 2. **Lack of Experience:** Individuals who have never visited any eye care centre. Their lack of direct experience may limit the relevance of their responses.
- **Study Tools** – Structured questionnaire used as the primary study tool.
- **Sampling Technique** – Convenience sampling
- **Sample Size** - 104
- **Duration of Study** – 3 months

RESULTS

Age wise Participants Percentage (%) - Demographic Data

Age Group	No. of Population	Percentage
12-18	2	1.94%
19-24	6	5.83%
25-34	7	6.80%
35-44	19	18.45%
45-54	20	19.42%
55-64	21	20.39%
65 or older	28	27.18%

Area wise Participants Percentage (%) - Demographic Data

Place	No. of Population	Percentage
Pappampatti	54	52.43%
Perur	49	47.57%

Gender wise Participants Percentage (%) - Demographic Data

Gender	No. of Population	Percentage
Female	58	56.31%
Male	45	43.69%

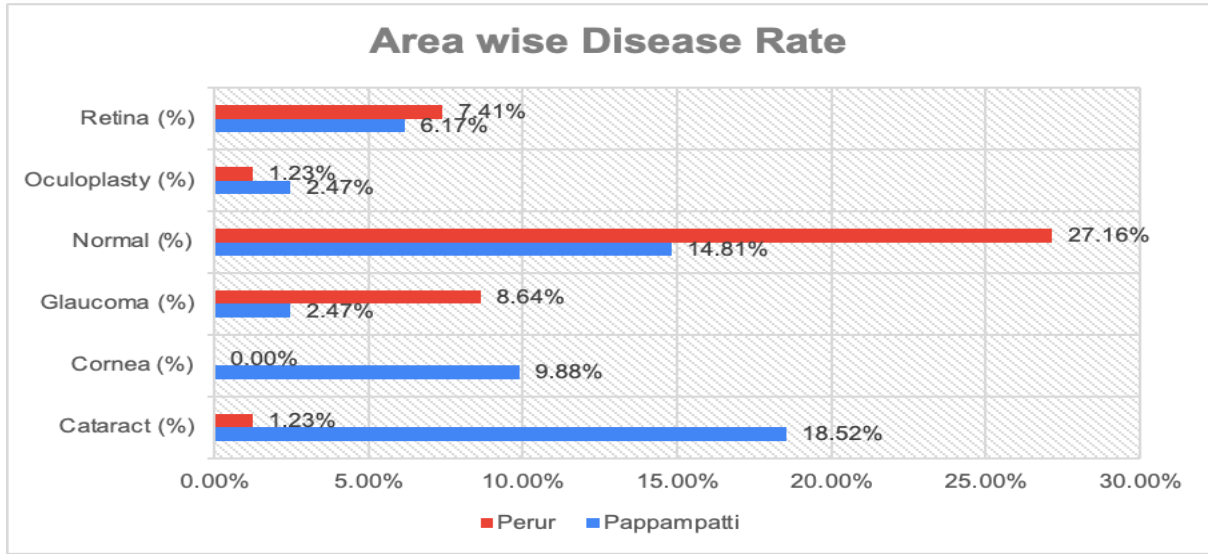
Education Level wise Participants Percentage (%) - Demographic Data

Education Level	No. of Population	Percentage
College/University Degree	22	21.36%
No formal education	32	31.07%
Primary Education	33	32.04%
Secondary Education	16	15.53%

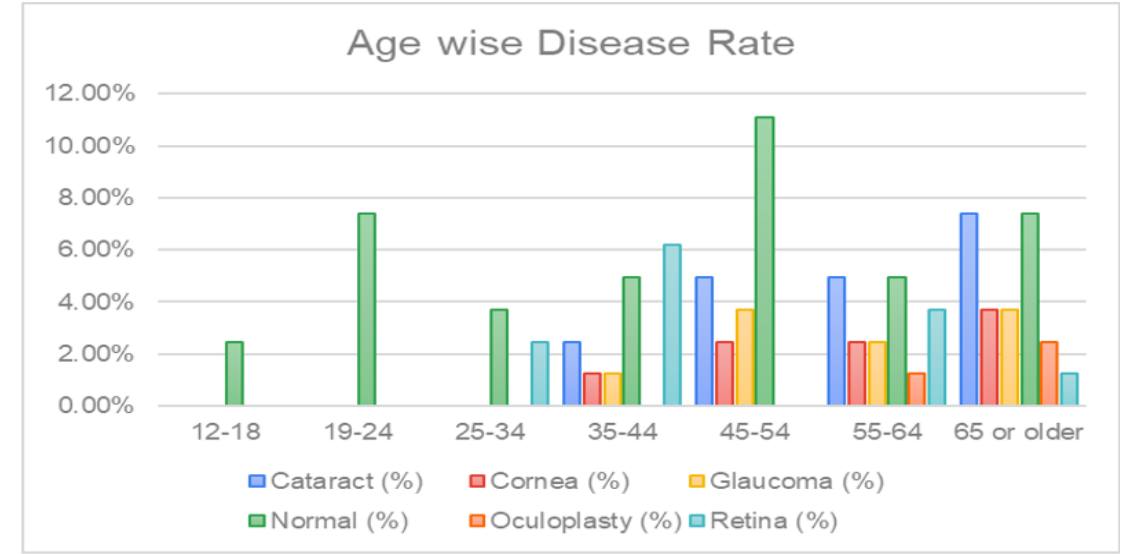
Factors Influencing in Selecting Eye Care Centres

Age Group	Access to specialized services or treatments (%)	Affordability of services (%)	Distance from my home or workplace (%)	Positive past experiences or reviews (%)	Reputation for quality care (%)	Suggestions from friends, family, or healthcare providers (%)
12-18	0.97%	1.94%	5.83%	1.94%	0.97%	0.00%
19-24	0.97%	3.88%	1.94%	0.97%	1.94%	2.91%
25-34	1.94%	2.91%	0.97%	0.97%	7.69%	0.00%
35-44	5.83%	4.85%	1.94%	2.91%	3.88%	0.97%
45-54	4.85%	6.80%	0.97%	0.97%	2.91%	2.91%
55-64	3.88%	7.77%	3.88%	3.88%	3.88%	7.69%
65 or older	6.80%	10.68%	1.94%	3.88%	3.88%	1.94%

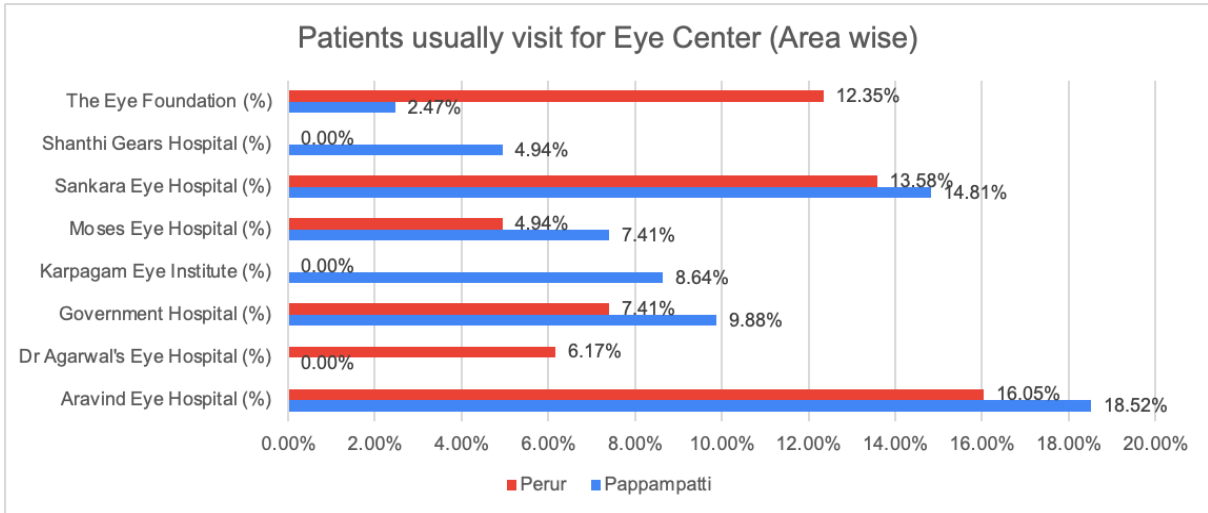
Disease Prevalence Rate Area wise



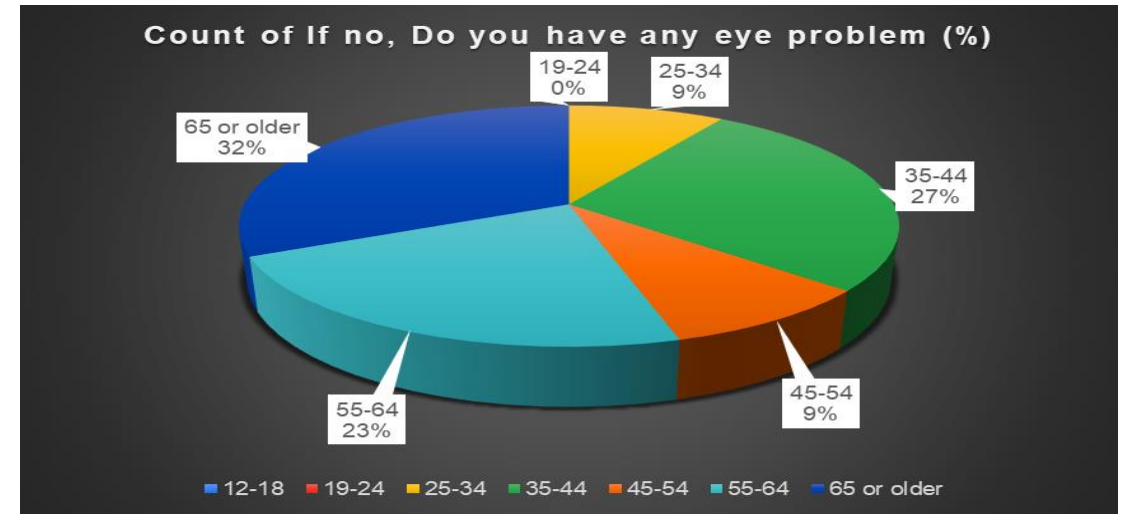
Disease Prevalence Rate Age Wise



Patients already visited to eye care centre



Prevalences of eye problem(Not visited to eye care centre)



DISCUSSION

Geographic variation in eye disease prevalence:

- Pappampatti: Higher rates of retina-related diseases, glaucoma, and corneal diseases
- Perur: Higher prevalence of cataracts

Age-related trends:

- Cataracts and glaucoma increase with age, most prevalent in 65+ group
- Normal eye conditions decrease steadily with age

Patient preferences for eye care facilities:

- Aravind Eye Hospital most preferred in both areas
- Disparities in utilization of other facilities between Perur and Pappampatti

Factors influencing eye care centre choice:

- Affordability: Major concern, especially for older adults
- Access to specialized services: Critical for elderly
- Proximity: Important for younger respondents
- Reputation and past experiences: Valued across all ages

Implications for providers and policymakers:

- Need for targeted screening programs and resource allocation
- Tailored strategies for each area (e.g., cataract focus in Perur, glaucoma in Pappampatti)
- Improve accessibility through tiered pricing, mobile units, awareness campaigns
- Explore sustainable financing mechanisms (community insurance, public-private partnerships)

RECOMMENDATION

Digital Presence

- Establish strong online presence
- Showcase patient reviews
- Attract new patients

Social Media Marketing

- Share patient photos and testimonials
- Build trust and credibility

Referral System

- Encourage referrals from camps to vision centre
- Emphasize importance of comprehensive exams

Market Area

- Implement "Shopkeeper Eye Health Day"
- Target older business owners

Health Worker Network

- Train ASHAs and VHNs for early detection
- Create referral network to Vision Centres

Cataract Finders Program

- Train community members
- Provide screening tools and transport assistance
- Ensure follow-up and treatment

Child Eye Care

- Increase focus using ICT materials

Community Engagement

- Give presentations at local gatherings
- Cover eye health topics for all ages

Zone-based Approach

- 0-3 km: Home visits and walk-in screenings
- 3-8 km: Camps and school screenings
- Implement referral system
- Follow-up and awareness campaigns

CONCLUSION



Key Findings:

Geographic variations in eye disease prevalence

Patient preferences for eye care center selection

Barriers to accessing eye care



Insights:

Location-specific approaches needed

Affordability is a major concern across age groups

Access to specialized services and proximity are important factors

Barriers include lack of awareness, financial constraints, and perceived lack of need



Recommendations:

Establish stronger digital presence for vision centers

Implement social media marketing

Foster partnerships with local health workers

Adopt zone-based community outreach



Potential Impact:

Enhanced quality and reach of eye care services

Reduced burden of vision impairment in Pappampatti and Perur communities

THANK YOU

