

SYNOPSIS

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1. TITLE : Evaluating the Perception of Accessibility and Patient Satisfaction Through Telemedicine at Sankara Vision Centres.

2. INTRODUCTION:

Access to quality eye care continues to be a significant challenge in rural and semi-urban regions of India, primarily due to financial constraints, geographic isolation, and limited healthcare infrastructure. To address these disparities, Sankara Eye Foundation India (SEFI) a leading not-for-profit organization has implemented a decentralized approach by establishing Vision Centres as satellite primary eye care facilities. These centres serve as the first point of contact for community members, bringing essential eye care services closer to underserved populations.

As of 2025, SEFI operates a total of 40 Vision Centres across India, offering localized, accessible, and affordable eye care. Among these, 18 Vision Centres are located in Tamil Nadu, with 15 under the Coimbatore Unit and 3 under the Krishnakoil Unit. These centres are managed by trained ophthalmic assistants who provide basic eye examinations, prescribe spectacles for refractive errors, and facilitate teleconsultations with base hospital ophthalmologists for advanced diagnosis and treatment.

An important innovation enhancing service quality at these centres is the use of Remidio, a portable, non-invasive, non-mydriatic fundus imaging device. It enables accurate detection of anterior and posterior segment conditions, greatly supporting remote consultation capabilities and timely referrals.

This study aims to evaluate the role of Vision Centres in terms of patient satisfaction, accessibility, and efficiency. Patient satisfaction reflects comfort with care, staff interactions, cleanliness, and the overall experience. Accessibility focuses on how easily patients can reach and afford the services, while efficiency examines the promptness of diagnosis, smooth referral systems, and effectiveness of teleconsultations.

Through this evaluation, the study seeks to highlight how Vision Centres are transforming primary eye care delivery and bridging access gaps for rural and semi-urban populations across Tamil Nadu and beyond.

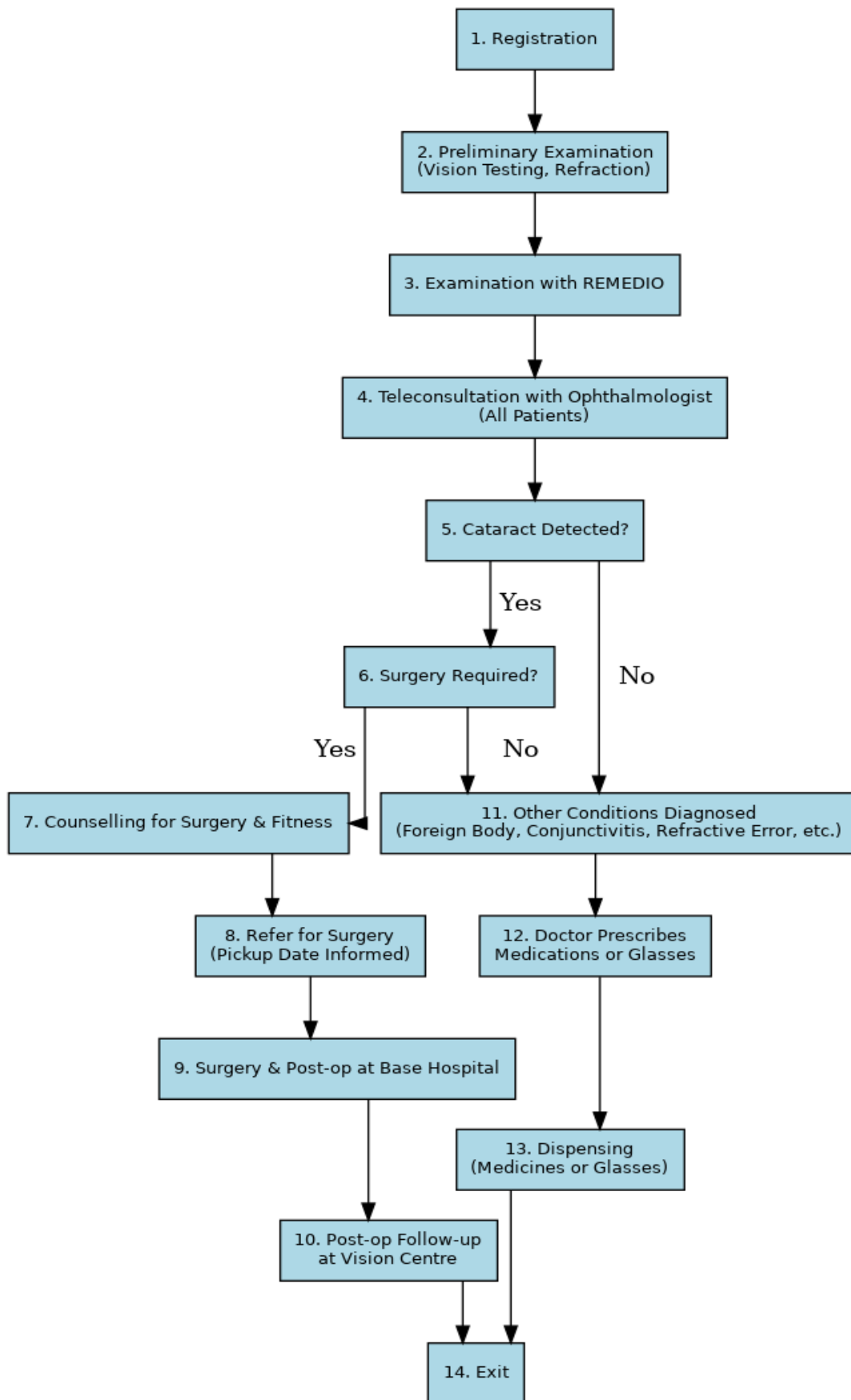
Vision Centre Timings

- **Operating Days:** Monday to Saturday
- **Timings:** 9:00 AM to 6:00 PM
- **Closed On:** Sundays and Government Holidays

The 18 Vision Centres are in Tamil Nadu:

1	Coimbatore	Ambur
2	Coimbatore	Anaikatti
3	Coimbatore	Annur
4	Coimbatore	Kallakuruchi
5	Coimbatore	Karamadai
6	Coimbatore	Krishnagiri
7	Coimbatore	Kulithalai
8	Coimbatore	Pappampati
9	Coimbatore	Perur
10	Coimbatore	Polur
11	Coimbatore	Sathyamangalam
12	Coimbatore	Virudhachalam
13	Coimbatore	Mannargudi
14	Coimbatore	Gudalur
15	Coimbatore	Sirkali
16	Krishnankoil	Aruppukottai
17	Krishnankoil	Rajapalaiyam
18	Krishnankoil	Sivakasi

Vision Centre process flowchart



3. RESEARCH QUESTION:

How do patients perceive the quality, accessibility, and overall effectiveness of eye care services delivered through telemedicine at Vision Centres operated by the Sankara Eye Foundation?

4. OBJECTIVES:

Primary Objective:

- To assess the overall satisfaction of patients utilizing telemedicine services at Vision Centres.

Secondary Objectives:

- To evaluate patient-perceived accessibility and efficiency of eye care services.
- To determine the clinical outcomes experienced through teleconsultations.
- To evaluate the quality of communication, physical environment, responsiveness, and the client–health care provider relationship at Vision Centres.

5. HYPOTHESES:

- **Null Hypothesis (H_0):** Teleconsultation services at Vision Centres do not significantly influence patient satisfaction compared to services provided without video consultation.
- **Alternative Hypothesis (H_1):** Teleconsultation services at Vision Centres significantly enhance patient satisfaction, particularly in aspects such as communication with the doctor, clarity of diagnosis, perceived quality of care, and overall patient experience compared to non-video consultations.

6. MATERIALS AND METHODS:

Study Design

The study followed a descriptive cross-sectional design aimed at capturing real-time patient feedback at the point of service.

Setting

- This study will be conducted across 14 Vision Centres affiliated with Sankara Eye Foundation, strategically located in semi-urban and rural regions, in the state of Tamil Nadu, India.

Study Population

Inclusion Criteria:

- Patients who received services at Vision Centres, whether through teleconsultation or in-person, and who provided verbal informed consent to participate were included in the study.

Exclusion Criteria:

- Patients under the age of 18
- Patients who were unwilling or unable to provide verbal consent
- Patients with incomplete or inconsistent responses

Study Tools

- Structured questionnaire- Google forms(Direct interviews / Telephonic interviews)

Duration of study: 3 months (04th April – 5th June 2025)

Sample Size: n=300

Sampling technique: Convenience Sampling

Data Collection

Data will be collected from 300 adult patients across 8 Vision Centres of Sankara Eye Hospital (5 in Coimbatore, 3 in Krishnakoil) using structured questionnaires. A convenience sampling method will be used. Data will be gathered through face-to-face and telephonic interviews over a 3-month period. Verbal informed consent will be obtained. Responses will be analysed using descriptive statistics and Chi-square tests to assess satisfaction, accessibility, and efficiency.

These centres were:

1. Annur
2. Perur
3. Sathyamangalam
4. Karamadai
5. Papampatti
6. Aruppukottai
7. Rajapalayam
8. Sivakasi

Operational Definitions

- **Teleconsultation** refers to the video-based interaction between patients at the Vision Centre and ophthalmologists based at the central hospital.
- **Satisfaction** refers to the extent to which patients felt their needs were met by the service.
- **Accessibility** refers to how easily patients were able to reach and utilize the Vision Centre services.

7. DATA ANALYSIS PLAN:

- **Microsoft Excel** used for: Mean, median, frequency & percentage
- **SPSS Software used for:** Chi-square test for significance

8. ETHICAL CONSIDERATIONS:

All ethical protocols were followed. The respective department heads have thoroughly reviewed and discussed the ethical aspects related to the proposed dissertation topic. Based on their evaluation, they have confirmed the ethical appropriateness of the study and have granted approval to proceed with the research. Verbal informed consent was obtained from every participant. Participation was completely voluntary, and no personal identifiers were collected. The data was stored confidentially and used solely for the purpose of this study.

9. IMPLICATIONS OF RESEARCH:

This research will provide valuable insights into the effectiveness of Vision Centres in delivering accessible, efficient, and patient-centred eye care in rural and semi-urban areas. For the population, it highlights the importance of teleconsultation, early diagnosis, and continuity of care ultimately contributing to the reduction of preventable blindness. For the healthcare industry, especially NGOs and hospital networks, the findings will support the scalability and optimization of decentralized eye care models. It can inform policy decisions, enhance outreach strategies, and improve service delivery frameworks in similar low-resource settings.

9. REFERENCES:

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