

Epidemiological Research Projects:

Completed projects

Andhra Pradesh Eye Disease Study

One of the largest epidemiological studies in the developing world, APEDS was launched in 1996 with an aim to understand the burden of vision loss and its risk factors.

Dubbed as one of the studies with robust and comprehensive study ever done in India, the results from this study had some far-reaching consequences in eye health in India and the rest of the world. The much accompanied and replicated LVPEI pyramidal model of eye care service is based on the results of this landmark study. The Andhra Pradesh Eye Disease Study, popularly known as APEDS has three phases:

- APEDS I: 1996 to 2000: Population-based cross-sectional study to assess prevalence and causes of visual impairment
- APEDS II: 2009 2010: A study to trace the original cohort of APEDS I and assess the mortality and migration trends.
- APEDS III: 2012 2016: A study to assess incidence (among non-cases) and progression (among cases) of blinding eye conditions among the surviving cohort of APEDS I participants

Rapid Assessment studies

Rapid assessment methods are quick and low-cost epidemiological study methods that can generate information, which can be used to plan health policies and programmes, as well as to deliver and improve services. LVPEI spearheaded the development of two new rapid assessment study methods, 1) Rapid Assessment of Refractive Errors (RARE) and 2) Rapid Assessment of Visual Impairment (RAVI). These methods are being used in several regions in developing countries. In total, 13 rapid assessment studies were conducted till date.

Refractive Error Study in Children

Refractive Error Study in Children (RESC) surveys were designed to assess the age- and sex-specific prevalence of refractive error and related visual impairment in children of different ethnic origins and cultural settings, using consistent definitions and methods and thereby providing directly comparable data from entirely different parts of the world. Mahbubnagar in Telangana was one of the two sites for RESC studies in India. The aim of this study was to assess the prevalence of refractive error and related visual impairment in school-aged children in the rural population of the Mahabubnagar district in the southern Indian state of Andhra Pradesh.

LVPEI-Glaucoma Epidemiology and Molecular Genomic Study (LVPEI-GLEAMS)

In the developing world, more than 90% of glaucoma is undetected due to the lack of appropriate screening methods. The LV Prasad Eye Institute Glaucoma Epidemiology and Molecular Genetic Study (LVPEI-GLEAMS) is a population-based study that aimed to



estimate the prevalence of, along with clinical, systemic and genetic risk factors for glaucoma in a rural population sampled from the state of Andhra Pradesh, India. The study also aimed to develop community screening strategies to diagnose glaucoma.

Barriers to uptake of referral services within L V Prasad's ICARE Pyramid: Khammam (2014), Mahbubnagar (2018)

Poor access to healthcare is a global issue that disproportionally affects resource-poor countries and correlates with poor health outcomes. Approximately 60%–70% of those who are referred to higher levels of care comply with their referrals. However, it is not known which factors are responsible for uptake of services or why some patients comply with referral services and others do not. Hence, this study was carried out to look at the referrals from one SC to TCs. Our objectives are (1) to identify barriers to the uptake of referral services from this SC to TCs, (2) to understand the characteristic differences between those who were compliant with referral services and those who were non-compliant, and (3) to examine the associated factors for non-compliance with referral services.

Prevalence, Causes and Risk Factors for Blindness and Low Vision in Children in Krishna District of Andhra Pradesh, India: Initiative for Screening Children for Refractive Errors and other Eye Health Needs (I-SCREEN)

The aim of the study was to provide the estimates of the prevalence, causes and risk factors for childhood related diseases in Krishna District, Andhra Pradesh (AP), India. The secondary objectives were, a) To assess Knowledge, Attitude and Practices (KAP) of parents for the uptake of eye care services in children, b) To understand barriers in accessing eye care services including low vision and rehabilitation services and c) To assess compliance to spectacles use in children.