**Aim**

To study the efficacy of a tele-audiological diagnostic follow-up model in a community based hearing screening program for infants and young children in rural villages in Tamil Nadu.

**Objectives**

1. To develop and evaluate a community based hearing screening program
2. To compare the follow up of tele-audiological diagnostic testing with the face to face diagnostic testing
3. To study the cost-effectiveness of using tele-audiological diagnostic follow-up as compared to face to face diagnostic follow-up
4. To study the parental perception regarding tele-audiological testing
Operational definitions:

1. **Infants**: Children under 1 year of age

2. **Young children**: Children greater than 1 year and less than 5 years of age

3. **Distortion Product Oto-acoustic emissions (DPOAE)**: a test used to assess outer hair cell function in the inner ear by recording emissions emanating from outer hair cell in response to acoustic stimulation. It is test routinely used for screening hearing.

   NOTE: There are two main screening interventions generally available for screening hearing among infants. These interventions are based on electrophysiological methods; Otoacoustic emissions (OAE) and automated auditory brainstem response (AABR). OAE measures sounds that are produced by the cochlea to response to acoustic stimulation and may be evoked by transient click stimuli (TEOAE) or as a distortion product of two click stimuli (DPOAE). AABR measures electroencephalographic waveforms recorded based on auditory nerve’s response to clicks at a particular intensity level. In this study, OAE screening was used as it is simple and easy to be used in the community by VHWs.

4. **Auditory Brainstem Response (ABR)**: a diagnostic test used to assess auditory evoked potential, obtained from the auditory nerve on acoustic stimulation