

Cohort Profile: Shahroud Eye Cohort Study

The Shahroud Eye Cohort Study was set up to determine the prevalence and incidence of visual impairment and major eye conditions in the 40-74-year-old population of Shahroud as a Middle Eastern population. The first phase of the study was conducted in 2009-10. Using random cluster sampling, 6311 Shahroud inhabitants were invited for ophthalmologic examinations; of these, 5190 participants completed phase 1 (participation rate of 82.2%). All participants were interviewed to collect data on participants' demographics, occupation status, socioeconomic status, history of smoking, and medical and ophthalmic history, as well as history of medication, and the quality and duration of their insurance. DNA and plasma samples, as well as four dots of whole blood were collected from participants. Extensive optometric and ophthalmologic examinations were performed for each participant, including lensometry of current glasses, testing near and far visual acuity; determining objective and subjective refraction; eye motility; cycloplegic refraction; colour vision test; slit-lamp biomicroscopy and intraocular pressure measurement; direct and indirect fundoscopy; perimetry test; ocular biometry; corneal topography; lens and fundus photography; and the Schirmer's (1008 participants) and tear breakup time tests (1013 participants). The study data are available for collaborative research at Noor Ophthalmology Research Center, Tehran, Iran.