

ABSTRACT

**BINOCULAR VISION IN MEDICAL STUDENT OF AIRLANGGA
UNIVERSITY CLASS OF 2014 USING TNO TEST.**

Background : Binocular vision literally means vision with two eyes and with binocular vision, we can see the world in three dimensions even though the images that fall on both of the retina were 2-dimensional images (Syauqie dan Putri, 2014). This 3-dimensional perception is called stereopsis, which is the highest level of binocular vision. There are several methods to determining stereopsis, one of them is the TNO stereotest, that using red-green analgyphic filters. In this study, researchers conducted a binocular vision examination, especially stereopsis vision, on students of FK Unair class of 2014 at IRJ Mata Dr. Soetomo Surabaya.

Method : This is a descriptive research, that is by doing the examination (*TNO Stereotest*) to know the average of binocular vision ability, especially stereopsis, in medical student of Airlangga University class of 2014.

Results : Out of 109 samples, 90 (83%) students had a good binocular vision, and 19 (17%) students had a binocular vision anomalies. Specifically, the stereoacuity results of the student are >480, 480, 240, 120, 60, 30 and 15 arcsec, in 5, 3, 2, 9, 38, 34 and 18 students, which means the most common stereoacuity was 60 arcsec (35%).

Conclusion : From the test results, we conclude that most of the medical student of Airlangga University class of 2014 have a good stereopsis vision, which means most of them have a good binocular vision ability, so they can continue their education to a specialist program that needing a good binocular vision such an Ophthalmologist, Micro-surgeon, etc

Keywords : *binocular vision, stereopsis, TNO stereo test*