ABSTRACT

**Background and purpose** – Diagnosing or screening pathological genu varum/valgum requires a reference value. Most previous research regarding Tibiofemoral angle (TF) and Intermaleolar/Intercondylar (IM/IC) distance are toward childrens and are conducted not in Indonesia. Previous studies have found that TF Angle and IM/IC distance varies between countries and races. TF angle can be measured radiologically and clinically. Clinical measurement is a good alternative compared to radiological measurements because it is quick, low cost, simple, reliable, and does not expose the patient to radiation. Therefore, the lack of knowledge regarding this matter in adult population and in Indonesia leads the researcher to study the topic. The aim of this study is to find the average TF angle and IM/IC distance in medical students of Airlangga University’s Medical Faculty batch 2013.

**Methods** – this study uses a descriptive epidemiologic method. The data is collected by direct measurement on the sample.

**Result** – We measured 168 students which fulfilled the inclusion criteria. 65% of the samples were 20 years old and 61% of the samples were females. Amongst the samples, 64% had normal BMI while 11% are underweight and 26% are overweight and obese. Average BMI is 22.9 ± 4.1. The average TF angle were -7.5° ± 3.35° valgum while the average IM/IC distance were -4.4 ± 33.09 mm intermalleolar. The average TF angle were more valgus compared to other studies but is comparable. IM/IC distance is more varus compared to other studies but is comparable.

**Conclusion**- Amongst medical students of Faculty of Medicine Airlangga University, the TF angle and IM/IC distance were comparable to other studies and mostly had valgus angle.

**Keywords** : Angular deformity, Genu Varum, Genu Valgum.