ABSTRACT

Sphygmomanometer is a human blood pressure measuring device which has several types such as mercury, digital, and aneroid. At this time, mercury Sphygmomanometer is not allowed to be used anymore considering the side effects of mercury which can harm the skin and even respiration. This study helps to reduce the use of mercury type Sphygmomanometer. The researchers make arduino TFT LCD display based Sphyhmomanometer so that the use of mercury can be reduced and make it easier for users to process measurement.

The researchers used the oscillmetry method in making the device to calulate the systolic and diastolic pressure. The result of blood pressure measurement has a systolic error rate of 0,08% and a diastolic error rate 0,09%.

Keyword: Sphygmomanometer Digital, Arduino, LCD TFT, Oscillometry Method.