## **ABSTRACT**

Fetal weight estimation during pregnancy is one of the beneficial ways to solve morbidity and death during labor problem. Birth weight will affect the accuracy of labor so that, it is expected to reduce mortality and morbidity on mother.

The fetal weight estimation technique that is often done by midwives is by measuring the fundal height. Fundal height measurement is precisely carried out on a centimeter scale.

There are several formulas to find out fetal weight estimation including Johnson Tohsach formula. The Johnson Tohsach formula uses a method to estimate fetal weight by measuring fundal height.

Manually, the fundal height is measured from the edge of the pubic symphysis to the top of the uterine fundus by following the arch of the uterus, using a measuring tape. But with the development of technology, it can be read automatically.

The calculation of fetal weight estimation tool uses a variable resistor (potentiometer) as a sensor to measure the fundal height. The measurement results are fundal height and estimation fetal weight that will be displayed on the TFT LCD.

Based on the results of measuring the fundus uterine height as much as 6 times against the calibrator, there is no error in the device so it can be concluded that this tool can be used according to its function.

Keywords: Estimation Fetal Weight, Fundal Height, Pubic Symphysis.