ABSTRACT

Baby Incubator one of medical equipment used to provide protection to premature babies (LBW). So far, baby care in baby incubator uses the method of separating the mother from her baby. A baby incubator was made using the Kangaroo Method (PMK) treatment, where this method can bring the baby and the mother closer. Main parameters of the baby incubator are temperature and humidity to monitor health and safety baby in baby incubator. The purpose of study was to analyze the feasibility of baby incubator humidity using 2 humidity sensors (DHT11 and DHT22). This research method uses pre-experimental with the type of research after only design, namely analyzing the measurements of the DHT11 and DHT22 sensors compared to the INCUII tool. The device which is equipped with kangaroo mode is set to a temperature of 32°C - 37°C and an ambient temperature of 27.2°C. Sensors used to detect temperature are 5 LM35 sensors with positions T1-T5. The humidity parameter of this tool is suitable for use because the humidity measurement results are according to the BPFK standard (50%-70%) with the measurement results of DHT11 46% and DHT22 55.45% and the comparison (INCUII) is 53.54%. The results of measurements of 2 humidity sensors that DHT22 is more accurate are proven by the DHT11 error value of 16.05% and the DHT22 error value of 3.47%. This means, DHT22 has a smaller error value than DHT11. It's recommended for next research to use a humidity sensor have small error value than DHT22 sensor.

Keywords: Kangaroo Mode, Humidity, Baby Incubator