ABSTRACT

Vaccine is an antigenic material used to produce active immunity to a disease so as to prevent/minimize the infection produced by the organism. One example is the measles and hepatitis B vaccine, which is placed in a storage room with temperatures between 2 degrees to 8 degrees Celsius. To facilitate the monitoring of vaccine storage temperature, a prototype innovation for measles vaccine storage temperature monitoring was created with DHT22 sensors based on the Internet of Things (IoT). With this innovation it will be expected that health workers can easily control the temperature of the vaccine room which ranges from 2 degrees to 8 degrees Celsius, because outside the temperature the nature of the vaccine will be weak. In this study, the room temperature was measured using a DHT22 sensor and then the data is forwarded to the NodeMcu 8266 microcontroller. Based on research that has been done, the temperature sensors for the measles vaccine get an error of 86.92%. And the humidity get an error of 59.61%.

Keywords: Vaccine, DHT22, Internet of Things.