

ABSTRACT

Body temperature monitoring for people who doing a homecare is important. Because an unstable condition when doing homecare, the body temperature can increase or decrease randomly. To prevent that bad impact are caused by body temperature's change so need the device or instrument which can monitoring and send notification to doctor that the pastient's body temperature is not in normal condition and the preventive handling can be implemented.

In this scope, the axilary method used to measure because this instrument character is monitoring and the sensor measure in the long period of time placed in patient's body so the axilary method is the match method in this case. This instrument measure the body temperature in axilary using DS18B20 sensor, then the microcontroller as a processor will show the value of temperature on LCD. The value of body temperature also send to android smartphone using bluetooth technology. For the abnormal temperature value will be notified to the doctor via Telemedicine (SMS).

From 5 patients and every patient will be measure 5x and fault measure $\pm 0.2^{\circ}\text{C}$ and the mean of %error is 0.11%

Keywords: Monitoring, Body Temperature, Telemedicine