ABSTRACT

Respiratory rate measurement tool is a technique used to determine the number of respiratory activity a person every minute. In the classification of the number of breathing per minute someone, can be divided into three groups, namely the so-called eupnea normal, above average breathing called tachypnea, while below the average so-called bradypnea. This method is highly dependent on the concentration of the mind and senses actors sensitivity measurement / observation. Therefore human nature is easy to forget, tired and bored, so now developed a method of measurement or observation of respiratory rate electronically.

In this study, respiratory rate measurement making use flex sensor by placing the sensor in the patient's stomach and will detect the curvature of the patient's stomach. Results from the patient's respiratory displayed on the LCD Character and android using HC-05 Bluetooth as the media sender.

The results of the measurement data of the 10 respondents indicated the average - average error of 3.2%. After testing and data collection can be concluded that the appliance is eligible to use because it is still within the tolerance range of 10%.

Keywords: Respiratory rate, Flex Sensor, HC-05 Bluetooth, Android