ABSTRACT

So far hospital patient monitoring systems mostly done conventionally. Which is nurse visit the patient by schedule. Monitoring tools for patient's condition stored indoors and can be checked only when nurse is in the room.

One of the conditions of patients who need to be monitored is the respiration rate. It refers to the concept of monitoring patients with “ABCD Secondary” called one of them is breathing. Respiration rate measures the patient's respiratory condition. The condition is control system places only in room. So if no one is in the room the patient's respiratory condition is not known.

Through this final project made a respiration rate monitoring devices that can be accessed in real time. With additional features can be reported in detail the results of monitoring normal condition or absence of respiratory patients. This final project has been designed respiration monitoring devices that can be accessed in real time via wifi network then received into smartphone. So the patient respiratory information still can be accessed. Monitoring data can be viewed through the smartphone and its visualize as graphs. Next we can know the classification of the patient's condition based on the value of respiration rate is calculated.

The system has accuracy performance 95,16% and using threshold 27. Respiration rate monitoring system is expected to be used and developed to assist in providing optimum services, especially in terms of monitoring the patient's condition.

Key Word : Respiration rate, wifi, *android, E-Health, chart.*