

## ABSTRACT

The development of increasingly advanced technology and growing cause everything can be done easily. Technological developments not only in the field of ICT, but also in health. Hospital or health center nurses frequently find that often times have to check the condition of the infusion bottle, is still fully charged or even be discharged. It was less efficient when the nurses had to check it every time.

Because it is in the execution of this Final Project designed a monitoring system based Hardware infusion bottles. The system is designed in the execution of this Final Project is to use an Arduino Uno, the sensor spring, and ZigBee Wireless.

Input data came from the sensor spring that serves infusion know the weight of the bottle, if there are changes in the mass of the infusion bottle, there will be a strain and change in ADC values due to the shift potentiometer. Sensors spring itself requires a sliding potentiometer to change the value of the ADC. If the condition of the infusion bottle is empty (100ml) last, then the spring will be changes in the sensor resistance of the original mass infusion bottles (200ml), after which the Arduino Uno will process the data input to be read by the alarm.

Thus monitoring system based hardware infusion bottles can be designed and used by nurses in the hospital.

**Keywords:** *ICT, Hardware, Arduino Uno, the sensor spring, ZigBee Wireless, Alarm*