

ABSTRACT

The Integrated Guidance Post (Posbindu) activities are carried out for early detection and monitoring of non-communicable disease risk factors (PTM) aged 15 years and over. Posbindu has a total of 5 stages of activity, one of which is in the first stage, namely registration and recording. Cadres do manual notes on paper to record the identities of Posbindu patients who attend. However, with many Posbindu patients attending, this method is less effective. By using the Internet of Things method, it can help the work of Posbindu cadres. The design of this system uses NodeMCU ESP8266 as a controller and WiFi module, which is equipped with RFID RC522 as a card reader that has specifications, namely an RFID chip. The way to find out the response from reading the card containing the Posbindu patient's identity is that there is a 16x2 I2C LCD which will display the patient's identity, a buzzer that will make a sound, and an LED that will display light. Google Spreadsheets is used as a database or storage of card readings automatically. When testing, this tool works fine. It is proven by the results that are in accordance with the Arduino IDE program script and Google Spreadsheet. The success rate percentage value on Google Spreadsheet of 99.1% with the longest delay of 8.6 seconds on the B1 card, and on the LCD of 88.3% with the longest delay of 15.4 seconds on the B2 card.

Keywords: *integrated guidance post (posbindu), internet of things, rfid rc522, nodemcu esp8266, google spreadsheet.*