

Title : A smart medicine reminder kit with mobile phone calls and some health monitoring features for senior citizens

Author Names: Liton Chandra Paul , Sayed Shifat Ahmed, Tithi Rani, Md Ashraful HaqueTushar
Kanti Roy, Md Najmul Hossain, Md Azad Hossain

Abstract: The demand for an effective system that combines cutting-edge technologies with [medical research](#) to improve healthcare systems has increased with the development of [medical technology](#). The most fundamental form of disease prevention is taking the right medication when needed. With the right care, many fatal diseases can be cured or prevented. Therefore, it is crucial to follow the doctor's recommended drug plan. Healthcare experts now have serious concerns about patients not being able to take their prescribed medications on time, particularly elderly patients. Due to age-related [memory loss](#), people who have been given multiple prescriptions at once over an extended period of time are more likely to forget to take their medication on time or to take the wrong medication. Sometimes, a patient's inability to take the right medication at the right time might have a major impact on their health. Aside from being forgetful, patients, especially the elderly and illiterate, may not be able to read the name stated on medical containers, leading to the consumption of the wrong medication. These errors contribute to non-adherence to [pharmaceuticals](#), which is detrimental to the [patient's health](#). As a result, there is a significant problem that hinders the success of the treatment. The medication reminder system is intended for people who frequently take medications or vitamin supplements in order to handle this. In order to help an elderly person properly take their medication and help the patient have a healthy life, we have created a ground-breaking portable multifunctional medicine reminder kit with phone calls. Other intelligent characteristics of the smart medicine reminder include the capacity to show the time, date, and day in real time, the detection of smoke, the measurement of air humidity and temperature in the room, the measurement of heartbeats per second, the patient's body temperature, and the [oxygen saturation](#) level.

Keywords: Smart medicine reminder box, Medication safety, Low cost, Health monitoring, Microcontroller, Real-time scheduling, GSM module

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