

PATIENT HEALTH AND MEDICAL PRACTITIONER PRESCRIBED DRUG PROVIDING

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Abstract-- Current advances in biomedical engineering and the science and technology of materials have brought about the creation of novel bioactive materials by which doctor himself can follow the proper guidance. When managing various rates of medications for different people that shape nervous disorders or strokes that cause people worried to die. In order to create drug handling's restriction actions, we handle a bio-medical sensor that can be vividly controlled by individuals. This research focuses on examining patient safety in remote areas and we can also serve pharmacy-only medication prescribed by pharmacy.

Keywords-- MEMS, Alcohol sensor, heart beat sensor

I INTRODUCTION

It has been stated that combinatory drugs have a higher efficacy and a lower need for individual drug dosage in treating various diseases including cancers[1].The key problems of anti-cancer drug combinatory studies, however, are the high drug costs inherent in the manual pipetting procedure, the reproducibility due to the repetitive procedure is very time-consuming for large-scale testing and the dynamic range limitation.Regulated, "on-demand" and localized drug delivery systems offer temporary and spatial regulation of drug release and have substantial benefits over immediate release, traditional delivery systems by reducing toxicity potential [2].

Microelectromechanical Systems (MEMS) technology offers the opportunity for the production of drug delivery devices with precise drug release control.In the literature preceding data on long-term drug delivery using MEMS devices with a single reservoir are not valid. Considering the rapid degradation of drugs in such systems, the necessary therapeutic doses that not be sustained after a short period of time making the long-term delivery of drugs a challenge [3].Usually a concept processing device ought to be able to gain and disperse appropriate quantity of the ideal chemicals in a survivable way. Multiple things affect the charging and dropping cycle like particle scale and load, the curvature of the delivery system, the particular manufacturing method and the chemical composition of the intended molecules [4].

An electronically controlled drug delivery system (eDDS) is currently under development for the on-demand release of anti-inflammatory, antimicrobial, and analgesic agents to assist in wound healing [5]. The loading of many drugs into conductive polymer films and their subsequent on-demand, controlled release has been demonstrated upon application of electrical potential to the polymer film.Relevant medications are those that have

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shown an ability to improve wound healing and include antibiotic, analgesic and anti-inflammatory agents so far [6]. The Automated drug intuition structure is provided by using sensors that function like a human being.

Simulated sensors are used using servo motors linked to a system of volt divisors. There is also note that for many diseases, there is often a health provider deficit and the skills needed [7]. Drug dosing is a procedure used to treat illnesses by correctly administering and monitoring medications that have been treated as having been associated with the accompanying disease [8].

Dose supplementation is a really positive thing important and difficult phase that the physician needs to control and prescribe correctly. Drug dosages in humans often depend on the recipient's size, location, weight and volume [9]. In view numerous methods of dosing the drug, conduct remedial treatment are new, and are possibly the best indicator for perceiving the dose. For targeted therapies nanobio systems are used. Food and Drug Administration (FDA) has approved the use of nanobio devices for guided treatment & therapeutic dosages, but there are not many models available [10-11].

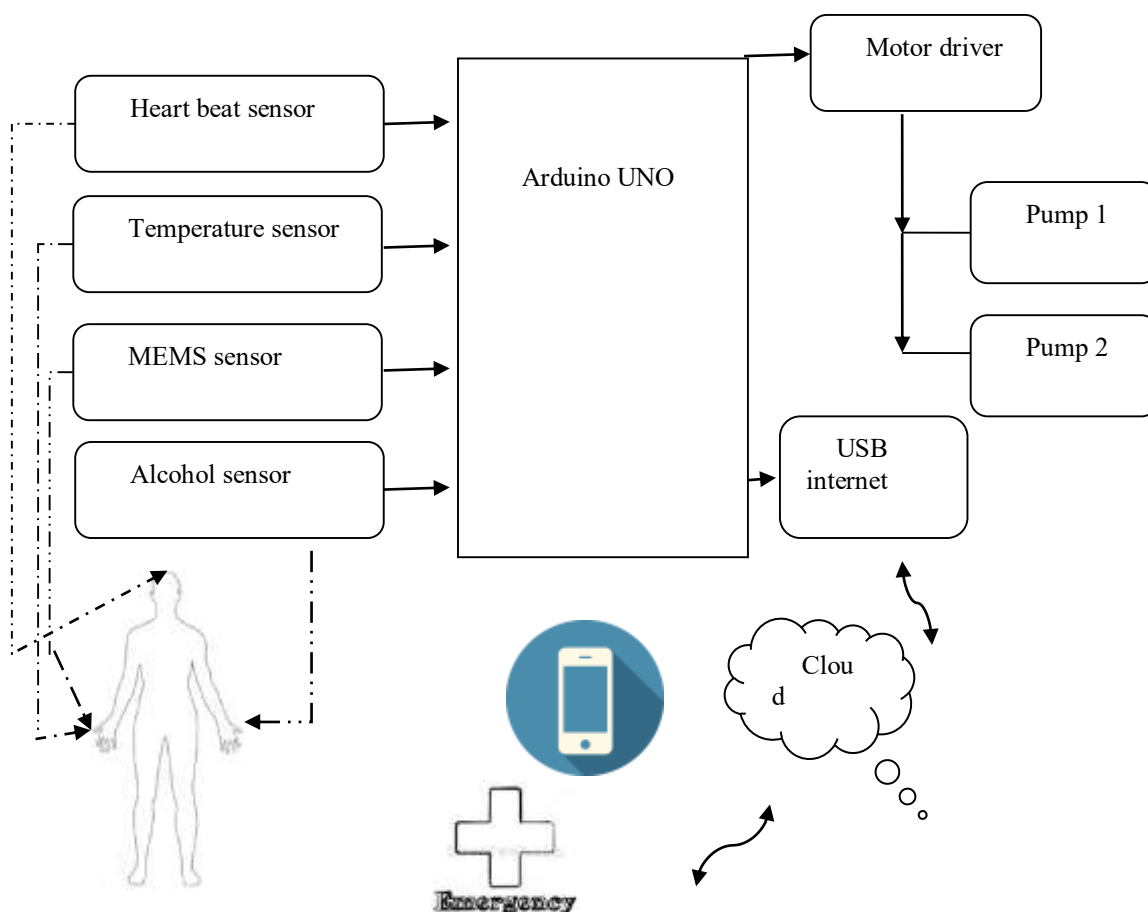


Figure 1: Block diagram

II PROPOSED SYSTEM

In this proposed work we are viewing persons heartbeat, temperature, MEMS, Alcohol consumption by this we can able to control antibiotic medicines for the certain limits for the patients through IoT. For controlling we

used Blynk app so that the doctor can operate anywhere from their place. The MEMS sensor will give the posture of the person. The internet connection for this proposed work can be given by the USB cable. In this case we use two pumps like motors so that amount of drug level can be given to the patient by the doctors. The motor driver will drive the pumps for the supply of the system. We use a submersible pump which is running voltage of 12V for an experiment. It will suck out the trusted antibiotic or prescription medicines for the patients from this pump. This pump can be attached electronically to the device, and it can be switched on and off automatically by the doctor itself.

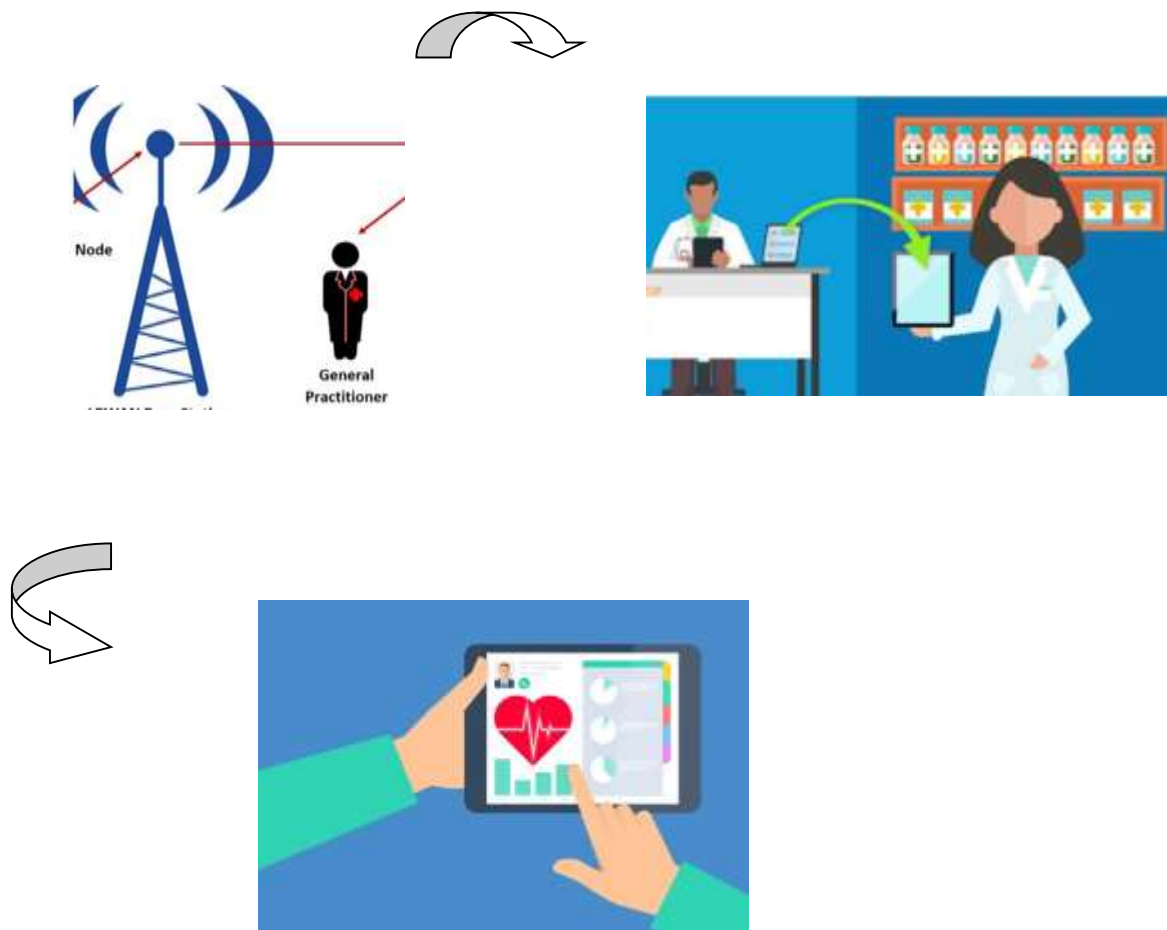


Figure 2: ARCHITECTURE OF PROPOSED WORK

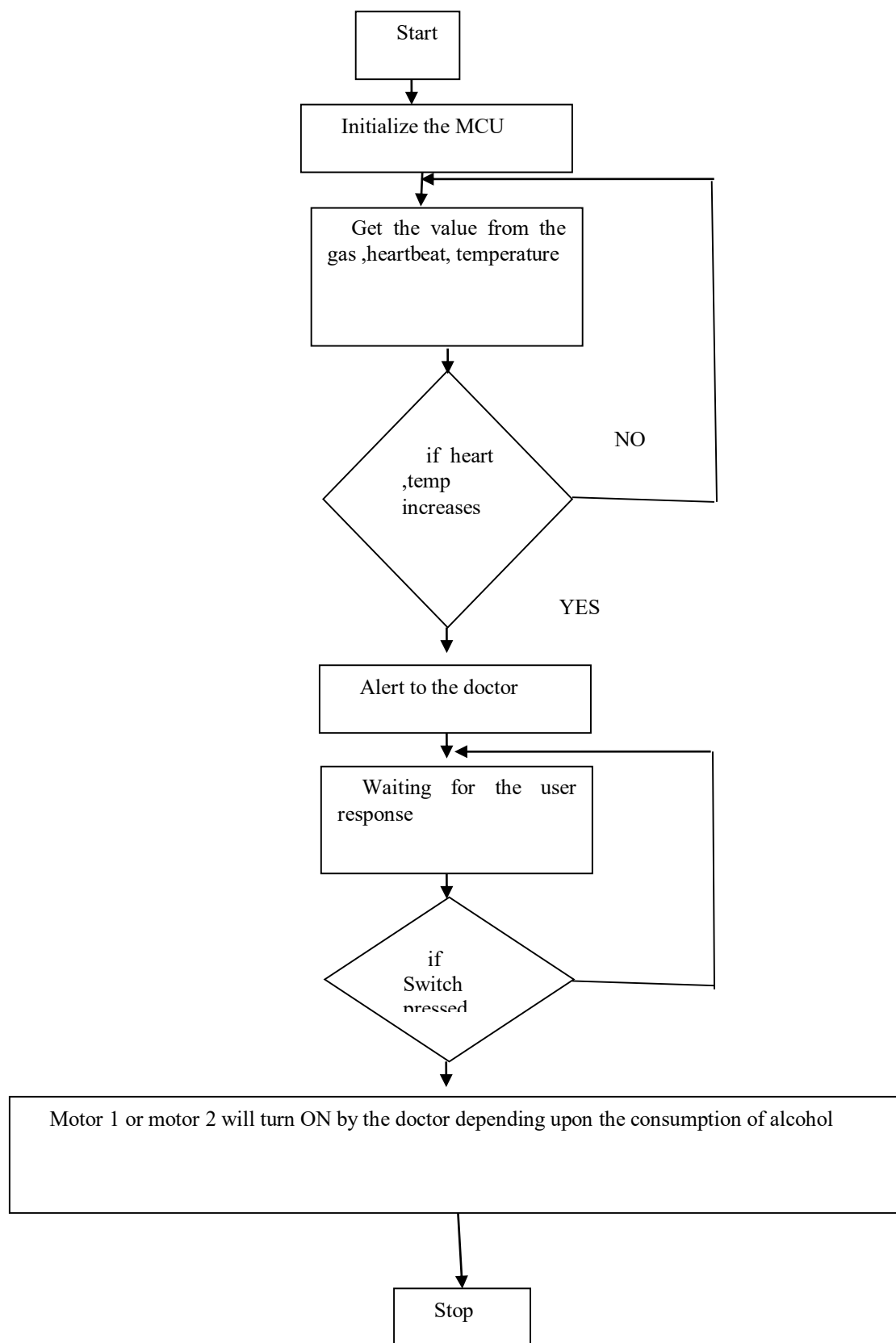


Figure 3: FLOW GRAPH

III RESULTS & DISCUSSION

By using the blynk app we can initiate viewing of heart beat rate, temperature and alcohol consumption of a human body. And by this technique the cause factor that what will happen when the doctors or concerned unavailable in the hospitals. So that the drug can be induces into the patient body by using this technique. For this alcohol sensor is used for the patient saturation point antibiotic.

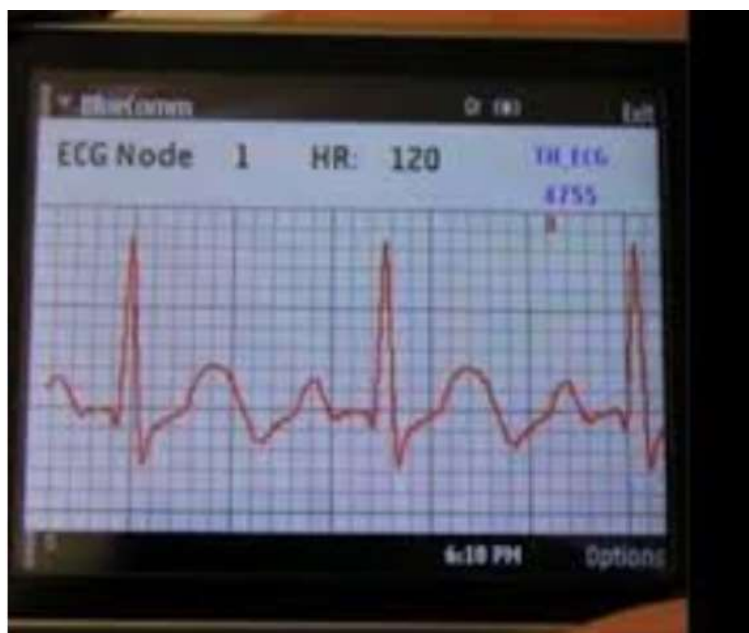


Figure 4: Heart rate using app

The above figure represents ECG note of heart beat using the app from this medical practitioner can be able to view the patient's heart rate anytime anywhere in the place.



Figure 4: Temp. Of patient

For the instant increase of patient temperature it is complex to monitor the temperature so that for every 15 to 30 minutes the live temperature value is given into the app.

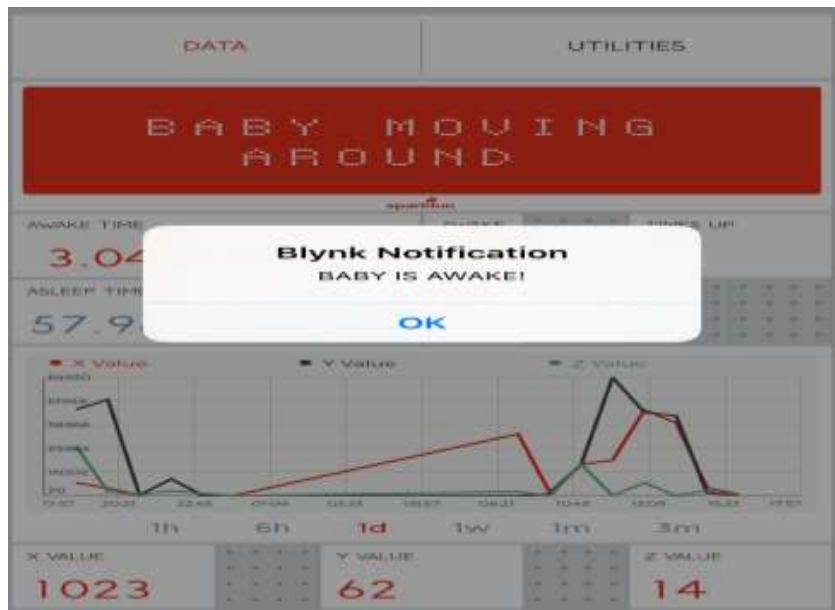


Figure 4: Posture movement of the patient.

The above figure gives the exact posture angle of the patient by using this app the here the baby will monitored as a patient posture so that the baby may or may not fall into the ground which causes death or some ir-replacement of bones. For same it can be used for many other coma patients or alcohol consumed persons.



Figure 5: Blynk app monitor for health of patient & drug level motor turn ON and OFF

IV CONCLUSION

And finally we have implemented the automatic drug delivery into the patient body so that with the attention of doctors live monitoring can be proposed in this system. The patients' health such as body temperature, heart beat with minimal rate of alert and patients posture movement for instance like a coma can be able give some signals to the validating superiors. For further usage of the monitoring in mere future live monitoring of patients health and video streaming can be proposed.

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