A SMART WIRELESS HEALTH MONITORING SYSTEM!

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Abstract: *In this article, the importance of developing a smart monitoring system using wireless network technologies is very important today. Remote patient monitoring is a serious challenge that needs to be addressed. For the convenience of patients, the "Online diagnosis" bot has been launched, this bot provides detailed information about the use of the device with Ardunio Uno software loaded.*

Key words: *Online diagnosis, health monitoring, telemedicine, medical service, bioelectrical signal.*

1. INTRODUCTION

Remote health monitoring systems (RHMS) in telemedicine include resources, strategies, methods, and devices that allow physicians or other medical professionals to work remotely to consult, diagnose, and treat patients. The objective of RHMS is to provide timely medical services in remote areas through telecommunication technology. Thanks to major advances in technology, particularly wireless networks, cloud computing, and data storage, RHMS is becoming a possible aspect of modern medicine.RHMS plays a necessary role in providing high quality medical services to provide stability to patients suffering from multiple chronic diseases (MCD-Multi Chronic Disease). For additional acquisitions to receive MCD patient preference for telemedicine workload. The stability of MCD patients in telemedicine supplements in this regard is comprehensive and inclusive of the developer. In addition, it presents problems and open problems related to patient stability in telemedicine.

2. Main part.

The results of this study are as follows:

Limitations and challenges of prioritizing existing patients with MCD are presented and highlighted.

Based on the analysis of the academic literature, no clear solution has been presented for distance prioritization in a large number of patients with MCD. There is a need to develop a new multi-criteria decision-making theory to solve the existing problems in prioritizing patients with MCD.

Telemedicine is increasingly being used in healthcare because it offers a number of advantages, such as providing patient health information and remote medical services.Telemedicine is a remote medical practice in which different health care providers collaborate to diagnose or treat a disease and allow their joint efforts.

Telehealth can be beneficial for patients living in isolated communities and remote regions if they receive professional care. from doctors or specialists who travel to visit them.

In telemedicine, triage is the concept of sorting patients according to the need for treatment in a wide range of emergency situations. In other words, it is the process of evaluating and prioritizing care for all patients and victims.A prioritization process is often followed to ensure that assistance is provided in an appropriate and timely manner. Early identification and prioritization of critically ill patients Admission levels to the Emergency Department (ED) are essential to the quality and integrity of emergency care. Therefore, patient prioritization focuses on identifying patients who can and cannot wait safely. Patient priority improves fairness and reduces wait times for emergency patients. It affects the differences between regions because it efficiently absorbs the available resources in each region.

The patient's case should be the main basis for assessing priority according to medical guidelines. Remote healthcare prioritization systems have received much attention due to their important role in people's lives. Remote prioritization refers to triangulating patients and prioritizing them for treatment and transport to hospitals after their vital signs have been assessed. For remote patients, continuous monitoring is highly desirable in a remote hospital as it ensures adequate care and provides appropriate instructions for proper medication.

Preparation of the objective and project of the telehealth system

1. Attach three electrode tabs to the object as shown in Figure 1. One patch is placed on the inside of the right forearm, the inside of the right upper forearm (distal to the elbow), and one patch on the inside of the left upper forearm (distal to the elbow).

2. Connect the sensor clamps to the electrode tabs as shown in Figure 1. The subject sits in a relaxed position on a chair, resting his wrists on the legs or arms of the chair.

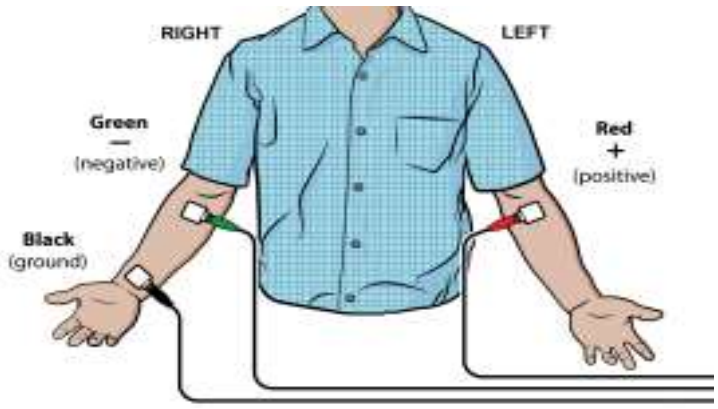

Figure 1. Placement of electrodes for ECG

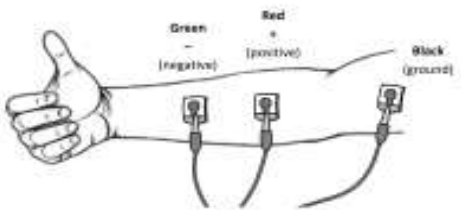

Figure 2. Service and maintenance

Do not wrap the cable tightly around the sensor for storage. Doing this repeatedly may damage the wiring beyond repair and will void the warranty.

3. Conclusion

In conclusion, it is worth noting that to use the sensor, the green and red wires are connected to a high-gain differential amplifier in the sensor, which is optimized for measuring bioelectrical signals. The high-gain amplifier circuit that measures the bioelectrical signals is electrically isolated from the output circuit that sends the information to our software. This electrical insulation serves to ensure the safety of the device for people.

USED LITERATURE:

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