

SELF- MONITORING OF URIC ACID BY USING MOBILE APPS
(ANDROID)

NORAMIRA BINTI MAT YAACOB


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Politeknik Sultan Salahuddin Abdul Aziz Shah

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ENDORSEMENT

"I hereby acknowledge that I have read this report and I find that its contents meet the requirements in terms of scope and quality for the award of the Bachelor of Electronic Engineering Technology (Medical Electronic) with honors"

Signature : 
Name of supervisor : PUAN RUSNANI BINTI YAHYA
Date : 18/7/2016

DECLARATION

"We hereby declare that the work in this report is our own except for quotation and summaries which have been duly acknowledge"

Signature : 
Name : NORAMIRA MAT YAACOB
Registration Number : 08UEU14F3014
Date :

DEDICATION

Special for my beloved family, especially my parents Mat Yaacob bin Dollah and my mother Faidah binti Mamat, as well as my siblings. The most important is my parents who are helping me financially and also for the words of encouragement when I felt down.

Do not forget also to lecturers and friends who always support and guidance, may Allah s.w.t blessed you alls.

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" By constantly praying all praise is due to Allah , the Lord of the universe , the Giver of Grace and taste that never stops , and peace and blessings be upon the Prophet Muhammad has lead mankind out of darkness into a brightly lit by God 's merciful again Most merciful " .

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ABSTRACT

This abstract is about self-monitoring of uric acid by using mobile apps (android). Advance in the technology helps everyone to communicate easily nowadays. The widespread use of cell phones, the rise of the internet and the advent of social media have changed the way we work, the way we live, and many more. Nowadays, the technology become easier to people. Therefore, more apps we have it today. For this project it's using Bluetooth to get the result and then transferred to the apps. The advantages of this project is user or patients can use it easily. No need to penetrate the skin with small needle and then use the strips blood test to know the reading like have been used it before this. Other than that this apps can give the awareness to user checking uric acid is also important same as checking cholesterol test, glucose test, and blood pressure. Uric acid also can cause the kidney failure if we didn't take the early precautions. By contrast, mobile apps are actual applications that can be downloaded and installed in your mobile device, rather than being rendered within a browser. Users or patients just need to show the result or reading of uric acid when seeing the doctor. It's good for self-monitoring yourselves because it can be used in everywhere and anytime. Therefore, this project will help user to monitoring by themselves. Besides that, it will give the alarm when the reading of uric acid is high. In overall, this project also like learning style or warning to the user because it indicates the food that must be avoided and taken, the precautions if get the high reading of uric acid and many more.

Keywords: uric acid, mobile apps, self-monitoring

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CHAPTER 1

INTRODUCTION

1.1 Background of research

A uric acid blood test also well known as a serum uric acid measurement. Basically it's for determine how much uric acid present in blood that don't realize before this. It's important to know how much body produces and removes uric acid. For those that don't know uric acid is a chemical produced when body breaks down foods that contain organic compounds called purines. Example of this foods include liver, anchovies, mackerel, dried beans, beer and wine. These purines are also created through the natural process of cell breakdown in the body.

Using Bluetooth to get the result and then transfer to the apps. Software used in this project is Android Studio .The advantages of this project is user or patients can use it easily. By contrast, mobile apps are actual applications that are downloaded and installed on your mobile device, rather than being rendered within a browser. Users or patients just showed the result or reading of uric acid when seeing the doctor. It's good for self-monitoring yourselves because can be use it everywhere and anytime. Therefore, this project will help user for monitoring by themselves.

No need to penetrate the skin with small needle and then use the strips blood test to know the reading like have been used it before this. Other than that this apps can give the awareness to user checking uric acid is also important same as checking cholesterol test, glucose test, and blood pressure. Uric acid also can cause the kidney failure if we didn't take the early precautions. By contrast, mobile apps are actual applications that can be downloaded and installed in your mobile device, rather than being rendered within a browser.

1.2 Problem Statement

There are several problems faced by users or consumers:

- (i) Takes time to get the result and cannot be save the data because need to squeeze drops of blood onto test strips and then process the results with the portable glucometers.
- (ii) Just record about patient details in the book and need time to search the book again if needed.
- (iii)Data storage for saving the data of patients is too limited.

1.3 Objective

There are three main objectives in this project. Among them are:

- (i) To give the awareness to people that uric acid test also important.
- (ii) To improve communication among patients, physicians, and other healthcare workers using mobile computing technologies.
- (iii)To record and store the data which is easily for doctor and patient.

1.4 Scope of project

The scope of the project should be produced so that the project can be generated as a preset. The scope of the project contained in this Self-Monitoring of Uric Acid by Using Mobile Apps (Android) are:

- (i) Android studio to do the apps and java for the language.
- (ii) Using non-invasive project to get the reading of uric acid that sent via Bluetooth.

1.5 Significance of Research

The widespread use of cell phones, the rise of the internet and the advent of social media have changed the way we work, the way we live, and many more. Nowadays, the technology become easier to people. Therefore, more apps we have it today. For this project it's using Bluetooth to get the result and then transferred to the apps. Therefore, this project will help user for monitoring by themselves. Besides that, it will give the alarm when the reading of uric acid is high. For the overall, this project also like learning style or warning to the user because have the food that must be avoid and take, the precautions if get the high reading of uric acid and many more. By scanning your fingertips, immediately the reading of uric acid will be appear. In addition, this non-invasive instrument was become famous now.

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