REMOTE MONITORING AND AUTOMATED DIAGNOSIS VIA INTERACTIVE SOFWARE INTERFACE USING WIRELESS COMMUNICATION NETWORK "TELEMEDICINE"

BY

[1]James Agajo , [2]Jonathan G. Kolo, [3]I. C. Obiora-Dimson,. [4]Okeke Benjamin Chukwuejekwu, [5]Lazarus O. Uzoechi

[1, 2] Dept. of Computer Engineering,
Federal University of Technology, P.M.B 65 Minna Nigeria
[3]Department of Electronic and Computer Engineering,
Nnamdi Azikiwe University Awka Anambra State
[4]Department of Information Management Technology,
Federal University of Technology Owerri Imo Nigeria
[5]Dept of Electrical/Electronic,
Federal University of Technology Owerri Imo State Nigeria

ABSTRACT

Remote monitoring and automated diagnosis via interactive software interface using wireless communication network, tends to come up with ways of diagnosing patient ailment in remote areas which is due to the absence of expert medical personnel in rural areas. The methods involve interconnection of stages as blocks like Collect, transmit, evaluate, modify and intervene process. The process adopt the use of GSM network for Communication. A Pseudo code and Software was developed with the aid of Visual Basic Program to enable login which will reveal captured patient records from a series of developed Software interfaces to provide patient history, Database for onward transmission to the Doctor, the result is viewed via an interface that provided the Doctor's diagnosis and prescription

Keyword: Telemedicine, GSM, Software interface, Patience record

INTRODUCTION

Worldwide, people living in rural and remote areas struggle to access timely, quality specialty medical care. Residents of these areas often have access to substandard specialty healthcare, primarily because specialist physicians are more likely to be located in areas of concentrated population. There is also the challenge of having very few experts especially those managing chronic diseases even in the urban areas. Effective management of diseases especially chronic diseases can result in improved health outcomes and increased quality of life since more than 80% of primary care visits and two thirds of medical admissions into hospital emergency departments are related to chronic diseases. For example, controlling a parameter such as blood pressure in people with diabetes and hypertension has been shown to reduce mortality and incidence of severe and costly complications such as renal and cardiovascular disease.

