Journal of Contemporary Issues in Business and Government Vol. 28, No. 04, 2022
https://cibgp.com/

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2022.28.04.167

MEDVINE

[1]B.VENKATESWAR RAO, [2]K.RAJU,[3]MD.ASMA,[4]B.TEJA SRI,[5]K.SWATHI

[1]Associate Professor, Dept. Of ECE, CMR COLLEGE OF ENGINEERING & TECHNOLOGY

[2]Assistant professor, Dept. of ECE, CMR COLLEGE OF ENGINEERING & TECHNOLOGY

[3]Assistant professor, Dept. of CSE, CMR COLLEGE OF ENGINEERING & TECHNOLOGY

[4-5]B-TECH,Dept.of AIML, CMR COLLEGE OF ENGINEERING & TECHNOLOGY

Abstract

The people who are in remote areas like villages and tribal areas are facing issues in collecting the medicines. As there is no proper medical facility available in their regions. Even though they are some medical camps are conducted but only for few days the medicines are available. So, it's difficult for the people in remote areas to get the medicine anytime they needed medicines. The main aim of the project is to help people in rural areas as they are facing difficulties in accessing healthcare facilities. It is designed by different electric components to dispense different medicines using coins. It can be placed at government medical hospitals or urban primary health cares. And it also includes symbols to make it easy for rural people to understand the description of the project.

1. INTRODUCTION

Nearly 2 billion people in the world have no access to basic medicines, causing a cascade of preventable misery and suffering. So, there is need for medicine vending machines which should be installed at every village where there is lack of availability of the doctors, pharmacy and medicines. The medvine is an automated machine that provides tablets to the consumers after inserting a 5 rupees coin. Medicine distribution for the people in the remote tribal areas is finding tedious task for the Government's, the Medvine can aid to resolve the above-mentioned requirement. This machine is equipped with some basic and emergency medication and can be refilled. It is a kind of computerized medicine storage system which can be easily accessed by the people

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2022.28.04.167

in emergency without approaching any pharmacy, this machine can be easy installed in the remote areas like long highways, desert areas, remote tribal areas and rural areas. It is a motor-based system to dispense the medicines when accessed by the user through an input event, the data pertaining to the medicine storage can be ascertained from the remote area and based on that information refilling the machine can be easily done.

2. RELATED WORK

Today, automation plays an important role in human life. People always look for convenience even in handling commodities and other basic needs in life such as food and medicine. Automation not only refers to reduce human effort but also energy efficiency and time saving. In places such as shopping malls, wholesale and retail outlets, automation is ncorporated for the automatic delivery of the products to the customers. As people continue to seek for convenience, more and more technologies are invented. One of these technologies is the vending machine. Vending machines come in different types as they are made for different purposes. Vending machines are rarely found in the market. They are a coin operated machine for selling merchandise. They have many benefits as well. The objective of this research is to design and construct the automatic medicine vending machine that dispenses the medicine when a 5 rupee coin is inserted in the input slot. The main aim of the machine is to make medicine available for 24 hours for every one even for a man who lives in a very remote village. Usually, these kind of vending machines do exist in the market but they are too costly and they are too much and they are also not easy to handle and they are not easily portable but the medicine vending machine which is designed is very easy to access and easily portable and very cheap compared to the existing solutions. The medvine which is designed is so cheap compared to the already existing machine which dispenses medicines which is out main aim. We used 4 buttons to take the input from the people and when the button is pressed then the signal gets transferred to the control and this triggers the process of dispensing machine and thus the medicine is being dispensed. A display is also used to display about the information about the tablets and the details about the medicines. We used 4 servo motors which are used to rotate the spring and hence to push the medicines ahead and to make them fall in the outlet. And to connect all

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2022.28.04.167

these we used many jumper wires to get them all together.

3. IMPLEMENTATION

Design a medicine vending machine "MEDVINE" which is automatic to operate with no human effort. The medvine shouldn't delay to give medicines. It should also consume less power. And the dispenser should be simple to operate. The cost of the dispenser should lie in between 1,200 to 2,000 so that it will be convenient for the users to buy the product. The aim of this prototype is that temporary relief is to be given out that can give people a better chance for resisting the health from withdrawing before they are able to reach doctor. Major advantage is that people would be able to access the medicines in public places such as malls, bus, railway stations etc. This project works on a very basic mechanism. It works on simple components limit switch, dc motors and push buttons. The machine should be connected to the battery. When the coin is inserted then it activates the limit switch and the push button is pressed. Then the respective dc motor rotates the respective spring and dispenses the medicine.

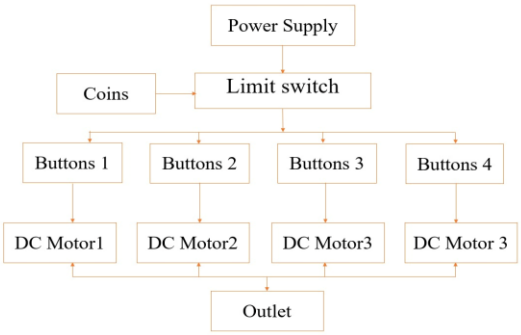
The medicine vending machine is a vending machine which is based on the 12v battery, Limit switch, push buttons, DC motors. It is convenience and easy to build and no many components are needed. This run automatically as long as it is supplied by the required amount of power.

4. EXPERIMENTAL RESULTS

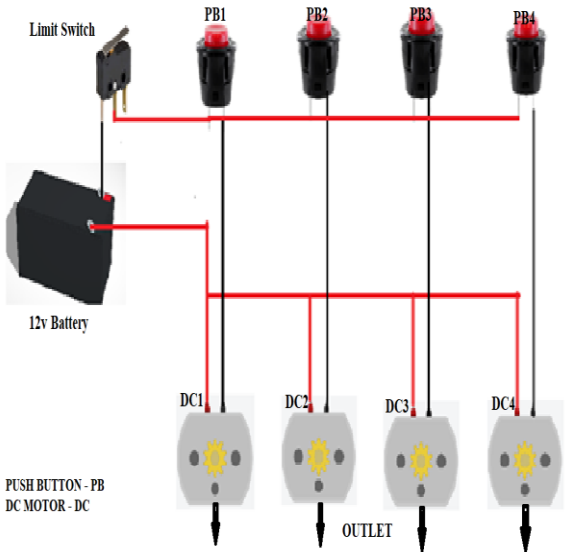
The "MEDVINE" is a self-contained on-site medicine dispensing mechanism and a storage facility for the plurality of medicine that can dispensed based on the user requirement. Major components of the machine are limit switch, push buttons, dc-motors, springs, 12 volts battery, connecting wires. The machine can be viewed as an automated pharmacy placed on a commercial scale so that infinite number of users will be able to access it anytime. The main aim of this project is to make medicine available for every person irrespective of where they live. We want to make medicine accessible for everyone and make them available even in very remote villages also. With people becoming more aware and concerned about their health, the research and development work on the area has grown considerably and is expected to continue to do with increased support from the governments and private organization and companies. In this section some of the

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2022.28.04.167

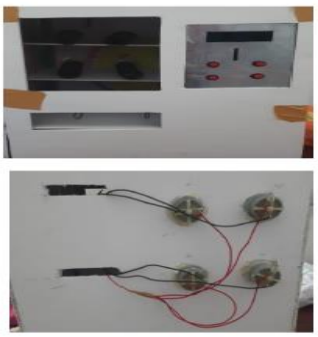
existing research on healthcare and medicine, access has been discussed which motivated the design and methodology of the MEDVINE machine.



Block Diagram



Circuit Diagram



Prototype

5. CONCLUSION

The medvine is technically feasible for the people. Medvine decentralized medication distribution systems that provide computer-controlled storage, dispensing of medicines. The automated medical system plays its major role in hostel areas, railway platforms, airports, and rural areas. Implementation of this system reduces man power 24 hours availability service and also reduces time consumption. It is important to consider how this technology may affect quality of medication delivery and use. It helps increase efficiency by lowering dependence on manpower. Most, importantly this portal can help people get the required medicine(s) very quickly in case of emergencies with the consent of are glistered doctor. At places were setting up pharmacies are difficult, for example, rough mountain terrains or remote highways, just an internet connection just an internet connection will be required to get the medicines from the medivne. Not only does this device provide medicines in emergency cases, but also makes the medicines business more secure and reduces the cost of these medicines compared to the retail outlets.

6. REFERENCE

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2022.28.04.167

1. Damm, J "An active solar tracking system, Home Brew Magazine " Issue #17, June/July 1990

2. MohdZulkifli, M.A.; Zolkapli .M.; Al-Junid, S.A.M. "High Efficency Dual Axis Solar Tracking Development Using Arduino" international conference of technology, informatics, management, engineering, and environment(TIME-E), 2013