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## **Survey on Vaccine Management System**

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**ABSTRACT**: Pandemic Covid-19 had seen more than many cases in last two years and it was very difficult to curb this disease with simple medical pills. Vaccination is but most important for curbing Covid 19 from happening and spreading. It is must vaccination for everyone. With growing need of vaccination for our large population it is really important to manage the system for vaccination to be given to people and keep count of it. Vaccination needs to be managed from manufacturer end to person booking and receiving the vaccination. Management of this is done with developed system. In this application person can book vaccination one week early and with information available the manufacturer is conveyed for making vaccine available for the booked date. The application helps to streamline the process of vaccination and make it easier to manage.

KEYWORDS: Management, Pandemic, Vaccine Management, Vaccination, Immunization.

#### I. INTRODUCTION

Vaccines for the coronavirus disease (COVID-19) offer hope for better containing the pandemic, which had infected more than 288 million people and killed more than 5 million as of 3 January 2022. A large COVID-19 vaccination campaign is particularly challenging in developing economies in Asia and the Pacific. Israel was first to show that vaccines were bending the curve of Covid infections. The country led the world in early vaccinations, and by February more than 84% of people ages 70 and older had received two doses. Covid cases declined rapidly, and a similar pattern of vaccination and recovery repeated across dozens of other countries. This progress is under threat. New strains, led by the highly transmissible delta variant, caused renewed outbreaks. Israel saw another surge of cases, which it brought under control by offering boosters to all vaccinated people. Worldwide, unvaccinated people are more at risk than ever, leading U.S. health officials to dub it a pandemic of the unvaccinated. Even among those who are vaccinated, the delta variant may lead to mild cases, and those who get sick are able to spread the disease to others, according to the latest data. The vaccines remain effective at reducing.

#### II. LITERATURE REVIEW

The section will drive use through various vaccination drive and management the countries have adopted to immunize all people.

#### Getting Ready for the COVID-19 Vaccine Rollout.

Many high-income economies have started vaccination, purchasing plenty of shots in advance to cover entire populations; but low- and middle-income economies might have to wait until 2022 or even 2023 to vaccinate a majority of their populations

#### Effective vaccine management: The case of a rural district in Ghana.

Vaccine Management (EVM) initiative provides the platform needed to monitor and assess the vaccine supply chain system to identify strengths and weaknesses of the system at all levels to enhance the development of improvement plan to strengthen the system. • is valuation was carried out in the Tolon District of the Northern Region, Ghana. Methods. A descriptive valuation of vaccine management was carried out in six vaccine stores in the Tolon District of Northern Ghana.

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### Assessment of factors affecting vaccine cold chain management practice in public health institutions in east Gojam zone of Amhara region

An institutional based cross-sectional study was conducted from March to April 2017 in ten districts of East Gojam zone of Amhara Region. Among 60 health institutions, only 46(76.7%) had functional refrigerators. Twenty-one (35%) had a functional generator for backup service and 28(46.6%) had a car/motorbike for transportation of vaccines in case of refrigerator/power failure. Twenty-nine (48.3%) had known the correct vaccine storage temperature ( $2 \degree C - 8 \degree C$ ) in the refrigerator and the results of this study revealed that only 23(38.3%) of respondents had sufficient knowledge about vaccine cold chain management. The finding of this study also revealed that 35(58.3%) had appropriate vaccine cold chain management practice and the rest 25(41.7%) had inappropriate practice. Logistic regression showed us the knowledge gap and profession were significantly associated with vaccine cold chain management practice at P < 0.05.

#### Effective vaccine management and Oman's healthcare system's challenge to maintain high global standards.

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) launched the effective vaccine management (EVM) framework to assist countries to gauge the performance of their immunization supply chains. Oman underwent the assessment in 2016 and scored the best score to date. This report looks at the process of EVM and the challenges for the Oman healthcare system to maintain high global standards. An EVM assessment uses a template designed to evaluate the 4 distinctly different levels in the supply chain (national, subnational, lowest delivery level, and service delivery points). Its tool is based on 9 basic criteria (vaccine and commodity arrival procedures, vaccine storage temperature, cold and dry storage capacity, buildings, cold chain equipment and transport, maintenance, stock management, effective distribution, good vaccine management practices and information systems and supportive management functions).

#### III. VACCINE MANAGEMENT METHODOLOGY

#### Existing System

During earlier times the person to be vaccinated had to visit hospital and take vaccination at spot without any prior appointment. The drawback behind this was the time spend during the vaccination and availability of vaccine at hospital



#### Fig.1 Existing System

#### **Proposed Method**

The working for proposed system started with initial request with URL address and return of Html page. With new technical development, the only needed request are send to server side. and remaining code remains same on client side. thus, it takes less time to process request.

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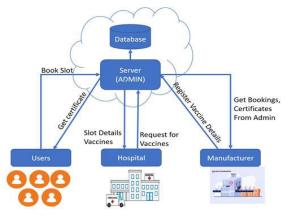


Fig.2 Proposed System

#### IV. CONCLUSION AND FUTURE WORK

With rapid spread of covid-19 everywhere it is very important to get all people vaccinated as fast as possible. For this management and coordination from manufacturer to people getting vaccinated is needed. The system helps to pipeline the process from manufacturing to vaccination. As system get enhanced new features can be added to make management smoother. More things can be added to the line of management.

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