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The Function of Covid-19 Vaccination Center at Local University Hospital in Saudia Arabia

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Abstract

The coronavirus (COVID-19) epidemic has seriously influenced people's health in several ways, and in order to prevent COVID-19 infection, more than 50 vaccines were created, and several of them were approved in December 2020. Many countries throughout the world have begun vaccination efforts. Nonetheless, people continue to question the efficacy and safety of vaccines, particularly the longevity of protection. Thus, this study aims This research summarizes the job of the COVID-19 vaccination center at the local university hospital in Saudi Arabia by referring to the data of the recipients of the COVID-19 vaccine at the hospital's vaccination centers at the University of Saudi Arabia from April 2021 to March 2022. Research findings found that the number of recipients of the COVID-19 vaccine during the pandemic period (106647) Health care personnel working at Saudi health care centers as well as others from Saudis and others, indicating that despite their fears of the vaccine, people had little confidence in the vaccine in the beginnings. However, vaccination has been shown to help reduce COVID-19-related deaths, serious diseases and COVID transmission. A large portion of the vaccinated population also protects those at risk of infection after vaccination. The study recommends that efforts by the University Hospital to curb the COVID-19 pandemic and the hospital's role in activating vaccination centers, health workers, other Saudis and others should be highlighted.

Keywords: *Covid-19, Vaccination, Public Health, Saudi Arabia.*



1- Introduction:

Since 2020, the coronavirus (COVID-19) pandemic has caused severe health concerns. More than 50 candidate vaccines were developed for COVID-19, and many vaccines were authorized to prevent COVID-19 infection in December 2020. Vaccination campaigns have started in a number of nations worldwide. Though many cases of reinfection have been documented, individuals continue to question the effectiveness and safety of vaccines, notably the durability of protection against COVID-19 (Chen, 2020).

Saudi Arabia has authorized the first vaccination for use, the BNT162b2 mRNA vaccine (Pfizer-BioNtech). Many concerns relating to the delivery of vaccines have been addressed by Saudi Arabia, including supply chain, governance, operations, digital communications, clinical care and education, quality assurance, and customer experience. Furthermore, in order to develop any vaccine-related adverse events, Saudi Food and Drug Administration (SFDA) and the Ministry of Health have teamed up to create an electronic reporting system to track any adverse reactions to vaccinations. An expert review panel examines these incidents to identify the type of adverse event, and its relation to the specific vaccine (Al-Qerem & Jarab, 2021).

At first, immunization operations were restricted to five sizable central locations with capacities for ultra-cold storage and delivery. There was a campaign prior to the start of the immunization program. Frontline



healthcare personnel, such as those who operate in emergency departments, fever clinics, auto testing facilities, critical care units, and isolation wards, as well as public health and infection control specialists, were given priority during the campaign. Older people (those over 65) and those residing in nursing facilities were the top priority high-risk groups. The following priority population category consists of people who are immunocompromised and have long-term medical issues that increase their chance of developing severe COVID-19.

Moreover, to achieve the utmost degree of equality in the vaccine, no expense has been spared. Visitors, locals, and citizens all have the right to register and receive the vaccination without charge. For people who couldn't access the system for any reason, proxy registration arrangements had to be made. It is important to note that refugees are given unique residence permits that allow them access to government services, including immunization programs. (Assiri & Jaffar, 2021).

Based upon the forgoing, this study aims at identifying the roles and functions of Covid 19 vaccination center in the local university hospital in Saudi Arabia.

2- Research Problem & Questions:

Vaccine reluctance and rejection are such major worldwide health dangers that the World Health Organization (WHO) has included this uncertainty as one of the top 10 health threats in 2019. (Geoghegan, 2020). Religious objections, personal convictions, and safety worries resulting from common fallacies, such as the link between vaccines and



illnesses like autism, brain damage, and other conditions, have all been identified as causes for vaccine hesitancy (McKee & Bohannon, 2018).

According to a study conducted in Saudi Arabia, more than 60% of participants indicated they would be open to receiving the COVID-19 vaccine if it became available (Al-Mohaithef & Padhi, 2020). Receiving a vaccination, however, may not accurately reflect a person's acceptance or resistance to the vaccine, as there may be other influences on how the vaccine is perceived by a person.

Hence, in order to predict the post-pandemic recovery profile and to demonstrate how trust will translate into widespread acceptance, it is crucial to report confidence, that is, acceptance and reluctance of a COVID-19 vaccine, among healthcare staff working in Saudi healthcare centers (Maqsood, 2022).

Despite these facts, unfortunately, not enough research has been done in Saudi Arabia to evaluate the attitudes of the locals and staff at vaccination clinics toward vaccination. To our understanding, the current study's challenge is to assess the Covid 19 immunization center's operations at the regional university hospital in Saudi Arabia, as well as measuring several sample attributes linked to vaccine refusal/frequency, including the center's employees.

In this manner, the main question of this study is: "What are the roles and functions of Covid 19 vaccination center in the local university hospital in Saudi Arabia?"



3- Aims & Objectives:

- Determining the number of COVID-19 vaccine recipients from April 2021 to March in 2022 in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia.
- Identification of the number of people infected with COVID-19 before taking the COVID-19 vaccine from April 2021 to March in 2022 in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia.
- To learn how the Covid 19 Vaccination Center's priorities, eligibility requirements, and scheduling are decided upon at the regional Saudi university hospital.
- To shed light on efforts conducted by Saudi Arabia to stop the pandemic from spreading, and the local university hospital's role from these efforts.

4- Literature Review:

*** Level of confidence in COVID-19 Vaccination**

An extraordinary amount of public interest in vaccinations has arisen because of the global effects of the COVID-19 epidemic. This involves concentrating on the creation of vaccines, regulatory analysis, and safety oversight. Many people have expressed worries about vaccination or delayed getting vaccinated as a result of reports of unpleasant events (side effects), and some have even firmly opposed immunization. The degree to which people trust national safety monitoring systems varies as well.



On the other hand, younger adults are typically less clinically affected by COVID-19 infection than older adults, so many may not see much benefit in getting vaccinated until more conclusive evidence emerges that vaccines stop transmission and are effective against mutated strains. This presents another challenge in communicating the significance of vaccination against COVID-19. Therefore, effective and consistent communication was crucial to assisting people in making their vaccination decision (Al-Qerem & Jarab, 2021).

However, it has been demonstrated that vaccination helps to reduce COVID-19-related fatalities, serious illnesses, and COVID-19 virus transmission. A substantial fraction of the population being immunized also protects those who are at danger of infection after vaccination, such as those who are unable to obtain immunizations or those who may still be at risk of infection. Widespread vaccination will eventually ease the burden of COVID-19 on healthcare systems by lowering the number of patients and preventing hospitalizations. Additionally, it will facilitate societies' return to normalcy and the opening of businesses (Assiri & Jaffar, 2021).

* **COVID-19 vaccination program in Saudi Arabia**

The COVID-19 vaccination program began by educating and training the organizational clinical team in order to get ready for the timely application and distribution of the vaccine across regions. As a result, vaccination managers at the regional and site levels were trained by conducting clinical and digital training programs on in-person and



virtual COVID-19 vaccination. This was accomplished with the help of all regional supervisors and leaders, who contributed great management and planning skills, as well as efficient work and maintaining strong, ongoing communication among clinical staff (Mehta, 2020).

An electronic COVID-19 vaccination-training platform was created, and it contains training materials, standard operating procedure procedures, and an assessment that immunization recipients must provide. To certify those who have passed the particular vaccine test, the registration records of people who have registered with the Saudi Commission for Health Specialties (SCFHS) must be verified (Alserehi, 2020).

Later on, authorities in Saudi Arabia organized the distribution of vaccines in the Kingdom through their electronic services represented in the “Sehaty” application, which is supervised by the Ministry of Health, and the “Tawakkalna” application, which is operated by the Saudi Authority for Data and Artificial Intelligence. "Tawakkalna" application is used to display a person's health status by showing his condition based on the official data he receives from the Ministry of Health, and color codes are used for that based on the person's immunization status (Assiri & Jaffar, 2021).

As a result, it is critical to make sure that vaccination supervisors and healthcare professionals receive the proper training and updates on the various COVID-19 immunization programs, as well as to equip these



teams with the necessary resources to fulfill their duties successfully and safely (Al-Mohaithef & Padhi, 2020).

*** Obstacles of the vaccination**

In order to implement the COVID-19 immunization program, ongoing program monitoring is essential for the early detection of impediments and issues linked to vaccines. The first barrier is the probable emergence of COVID-19 vaccine side effects, which demand constant monitoring to assure the safety and wellbeing of the vaccine after immunization (Dana Freiser, 2022).

Increased incidence of these side effects, which can range from nausea and fever to vasovagal episodes and anaphylactic reactions, can be fatal. To ascertain the incidence and seriousness of vaccine-related adverse events, the Saudi Ministry of Health has released its emergency medical protocol for handling anaphylactic reactions and using the SFDA website to report adverse events. Additionally, this platform is connected with Sehaty (Sehaty App) to effectively manage individuals who had allergy and hypersensitivity on the first dose (Al-Mohaithef & Padhi, 2020).

*** Vaccine-related incidents**

An Incident Reporting System (IRS) tool was created to keep track of technological incidents involving the vaccination. This covers a variety of incidents, including spills, breaks, fires, shortages of



supplies, needle stick injuries, and other errors that may happen at vaccination sites.

For a safe and effective vaccine, for instance, syringe quality is crucial. In order to provide high-quality products and alternatives in the event of recurrent incidents, so it is the Ministry of Health's obligation in collaboration with the supply chain partner National Unified Procurement Company (NUPCO) to provide these high quality products (Assiri & Jaffar, 2021).

*** Progress of vaccination in Saudi Arabia**

On December 17, 2020, Saudi Arabia began its COVID-19 vaccine campaign. The "Pfizer" corporation requested that the Saudi Food and Drug Authority authorize the registration of the "Pfizer-BioNtech" vaccine against the Corona virus in the Kingdom of Saudi Arabia on November 24, 2020. On December 10, 2020, the Saudi Food and Drug Authority granted that request. On December 16, 2020, Saudi Arabia received the first shipment of the Pfizer-Biontech vaccine, followed by the second shipment later that day. The Food and Drug Authority granted permission for the AstraZeneca vaccine, which was created by the British-Swedish business AstraZeneca in collaboration with the University of Oxford, to be used on February 18, 2021. (Al-Tawfiq & Memish, 2020).

On May 17, the Ministry of Health announced that four vaccinations, manufactured by Pfizer, AstraZeneca, Moderna, and Johnson & Johnson, were shown to be effective against the Corona virus in Saudi



Arabia. Following studies showing the possibility of administering two doses of two different coronavirus vaccines safely and effectively, the Saudi Ministry of Health announced later on that the National Committee for Infectious Diseases had approved the possibility of taking the first and second doses of two different coronavirus vaccines (Al-Qerem & Jarab, 2021). Following submission of the manufacturer's request, the Food and Drug Administration on November 3, 2021, authorized the use of the Pfizer vaccine for children aged 5 to 11 years (Banjar, 2021).

5- Research Methodology:

The quantitative descriptive approach will be used in this research study in order to fulfill the goals and objectives of the investigation. In order to give a thorough background with the most knowledge that explains the phenomenon (The Function of Covid-19 Vaccination Center at Local University Hospital in Saudia Arabia), it will use a quantitative survey. It will then be spread after the results are confirmed in order to help the researcher get the desired results (Creswell, 2008).

6- Sample research

The study sample on all data of COVID-19 vaccine recipients at the hospital's vaccination centers included the University of Saudi Arabia during the period April 2021 to March 2022.

7- The result and discussion of the study.

7.1 The number of COVID-19 vaccine recipients from April 2021 to March 2022 in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia.

Table1: The number of COVID-19 vaccine recipients from April 2021 to March 2022

The month	number	Percent
April 2021	3291	3.09%
May 2021	10968	10.28%
June 2021	6800	6.38%
July 2021	22444	21.05%
August 2021	14657	13.74%
September 2021	6081	5.70%
October 2021	4432	4.16%
November 2021	521	0.48%
December 2021	8253	7.74%
January 2022	17385	16.30%
February 2022	7815	7.33%
March 2022	4000	3.75%
Total	106647	100%

It was noted from table (1) that:

- The number of recipients of the COVID-19 vaccine for April 2021 (3,291) and 3.09% of the total beneficiaries of the COVID-19 vaccine at the vaccination centers at the University Hospital in Saudi Arabia.



- The number of recipients of the COVID-19 vaccine for May 2021 (10,968) and 10.28% of the total beneficiaries of the COVID-19 vaccine at the vaccination centers at the University Hospital in Saudi Arabia.
- The number of recipients of the COVID-19 vaccine for June 2021 (6,800) and 6.38% of the total beneficiaries of the COVID-19 vaccine at the vaccination centers at the University Hospital in Saudi Arabia.
- The number of recipients of the COVID-19 vaccine for July 2021 (22,444) and 21.05% of the total beneficiaries of the COVID-19 vaccine at the vaccination centers at the University Hospital in Saudi Arabia.
- The number of recipients of the COVID-19 vaccine for August 2021 (14,657) and 13.74% of the total beneficiaries of the COVID-19 vaccine at the vaccination centers at the University Hospital in Saudi Arabia.
- The number of recipients of the COVID-19 vaccine for September 2021 (6,081) and 5.70% of the total beneficiaries of the COVID-19 vaccine at the vaccination centers at the University Hospital in Saudi Arabia.
- The number of recipients of the COVID-19 vaccine for October 2021 (4,432) and 4.16% of the total beneficiaries of the COVID-19 vaccine at the vaccination centers at the University Hospital in Saudi Arabia.
- The number of recipients of the COVID-19 vaccine for November 2021 (521) and 0.48% of the total beneficiaries of



the COVID-19 vaccine at the vaccination centers at the University Hospital in Saudi Arabia.

- The number of recipients of the COVID-19 vaccine for December 2021 (521) and 0.48% of the total beneficiaries of the COVID-19 vaccine at the vaccination centers at the University Hospital in Saudi Arabia.
- The number of recipients of the COVID-19 vaccine for January 2022 (17,385) and 16.30% of the total beneficiaries of the COVID-19 vaccine at the vaccination centers at the University Hospital in Saudi Arabia.
- The number of recipients of the COVID-19 vaccine for February 2022 (7,814) and 7.33% of the total beneficiaries of the COVID-19 vaccine at the vaccination centers at the University Hospital in Saudi Arabia.
- The number of recipients of the COVID-19 vaccine for March 2022 (4,000) and 3.75% of the total beneficiaries of the COVID-19 vaccine at the vaccination centers at the University Hospital in Saudi Arabia.

7.2 Number of COVID-19 vaccine recipients by job classification from April 2021 to March 2022 at the University Hospital vaccination centers in the Kingdom of Saudi Arabia.

Table 2: The number of COVID-19 vaccine recipients by job classification from April 2021 to March 2022

The month	job classification	number	Percent
April 2021	healthcare staff working in Saudi healthcare centers	343	10.42
	Other	2948	89.58
	Total	3291	100%
May 2021	healthcare staff working in Saudi healthcare centers	270	2.46
	Other	10698	97.54
	Total	10968	100%
June 2021	healthcare staff working in Saudi healthcare centers	522	7.68%
	Other	6278	92.32%
	Total	6800	100%
July 2021	healthcare staff working in Saudi healthcare centers	1541	6.9%
	Other	20903	93.1%
	Total	22444	100%
August 2021	healthcare staff working in Saudi healthcare centers	600	4.1%
	Other	14057	95.9%
	Total	14657	100%
September 2021	healthcare staff working in Saudi healthcare centers	569	8.4%
	Other	5512	90.6%
	Total	6081	100%
October 2021	healthcare staff working in Saudi healthcare centers	28	0.7%

	Other	4404	99.3%
	Total	4432	100%
November 2021	healthcare staff working in Saudi healthcare centers	10	1.9%
	Other	511	98.1%
	Total	521	100%
December 2021	healthcare staff working in Saudi healthcare centers	750	9.1%
	Other	7503	90.9%
	Total	8253	100%
January 2022	healthcare staff working in Saudi healthcare centers	1260	7.2%
	Other	16125	92.8%
	Total	17385	100%
February 2022	healthcare staff working in Saudi healthcare centers	62	0.8%
	Other	7753	99.2%
	Total	7815	100%
March 2022	healthcare staff working in Saudi healthcare centers	59	1.5
	Other	3941	98.5
	Total	4000	100%
Total		106647	

It was noted from table (3) that:

- The number of recipients of the COVID- 19 vaccine for health-care personnel working in Saudi health-care centers in April 2021 (343) and 10.42% of the total beneficiaries of the COVID- 19 vaccine in the month of April at the University Hospital in Saudi Arabia, while the number of other beneficiaries of the COVID-19 vaccine (2948) and 89.58%.



- The number of recipients of the COVID- 19 vaccine for health-care personnel working in Saudi health-care centers in May 2021 (270) and 2.46% of the total beneficiaries of the COVID-19 vaccine in the month of May at the University Hospital in Saudi Arabia, while the number of other beneficiaries of the COVID-19 vaccine (10698) and 97.54%.
- The number of recipients of the COVID- 19 vaccine for health-care personnel working in Saudi health-care centers in June 2021 (522) and 7.68% of the total beneficiaries of the COVID-19 vaccine in the month of June at the University Hospital in Saudi Arabia, while the number of other beneficiaries of the COVID-19 vaccine (20903) and 92.32%.
- The number of recipients of the COVID- 19 vaccine for health-care personnel working in Saudi health-care centers in July 2021 (1541) and 6.90% of the total beneficiaries of the COVID-19 vaccine in the month of July at the University Hospital in Saudi Arabia, while the number of other beneficiaries of the COVID-19 vaccine (20903) and 93.10%.
- The number of recipients of the COVID- 19 vaccine for health-care personnel working in Saudi health-care centers in August 2021 (600) and 4.10% of the total beneficiaries of the COVID-19 vaccine in the month of August at the University Hospital in Saudi Arabia, while the number of other beneficiaries of the COVID-19 vaccine (14057) and 95.90%.
- The number of recipients of the COVID- 19 vaccine for health-care personnel working in Saudi health-care centers in



September 2021 (569) and 8.40% of the total beneficiaries of the COVID- 19 vaccine in the month of September at the University Hospital in Saudi Arabia, while the number of other beneficiaries of the COVID-19 vaccine (5512) and 90.60%.

- The number of recipients of the COVID- 19 vaccine for health-care personnel working in Saudi health-care centers in October 2021 (28) and 0.70% of the total beneficiaries of the COVID-19 vaccine in the month of October at the University Hospital in Saudi Arabia, while the number of other beneficiaries of the COVID-19 vaccine (4404) and 99.30%.
- The number of recipients of the COVID- 19 vaccine for health-care personnel working in Saudi health-care centers in November 2021 (10) and 1.90% of the total beneficiaries of the COVID- 19 vaccine in the month of November at the University Hospital in Saudi Arabia, while the number of other beneficiaries of the COVID-19 vaccine (511) and 98.10%.
- The number of recipients of the COVID- 19 vaccine for health-care personnel working in Saudi health-care centers in December 2021 (750) and 9.10% of the total beneficiaries of the COVID- 19 vaccine in the month of December at the University Hospital in Saudi Arabia, while the number of other beneficiaries of the COVID-19 vaccine (7503) and 90.90%.
- The number of recipients of the COVID- 19 vaccine for health-care personnel working in Saudi health-care centers in January 2022 (1260) and 7.20% of the total beneficiaries of the COVID-19 vaccine in the month of January at the University Hospital in



Saudi Arabia, while the number of other beneficiaries of the COVID-19 vaccine (16125) and 92.80%.

- The number of recipients of the COVID- 19 vaccine for health-care personnel working in Saudi health-care centers in February 2022 (62) and 0.80% of the total beneficiaries of the COVID-19 vaccine in the month of February at the University Hospital in Saudi Arabia, while the number of other beneficiaries of the COVID-19 vaccine (7752) and 98.20%.
- The number of recipients of the COVID- 19 vaccine for health-care personnel working in Saudi health-care centers in March 2022 (59) and 1.50% of the total beneficiaries of the COVID-19 vaccine in the month of March at the University Hospital in Saudi Arabia, while the number of other beneficiaries of the COVID-19 vaccine (3941) and 95.50%.

7.3 Number of people infected with COVID-19 before taking the COVID-19 vaccine from April 2021 to March in 2022 in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia.

Table 3: The number of people infected with COVID-19 before taking the COVID-19 vaccine from April 2021 to March in 2022

The month	Covid Positive Before	number	Percent
April 2021	Yes	92	2.8%
	No	3199	97.2%
	Total	3291	100%
May 2021	Yes	263	2.4%
	No	10705	97.6%
	Total	10968	100%
June 2021	Yes	189	2.8%
	No	6611	97.2%
	Total	6800	100%
July 2021	Yes	310	1.4%
	No	22134	98.6%
	Total	22444	100%
August 2021	Yes	628	4.3%
	No	14029	95.7%
	Total	14657	100%
September 2021	Yes	129	2.1%
	No	5952	97.9%
	Total	6081	100%
October 2021	Yes	7	0.2%
	No	4425	99.8%
	Total	4432	100%
November 2021	Yes	0	0%
	No	521	100%
	Total	521	100%
December	Yes	208	2.5%

2021	No	8045	97.5%
	Total	8253	100%
January 2022	Yes	736	4.2%
	No	16649	95.8%
	Total	17385	100%
February 2022	Yes	0	0%
	No	7815	100%
	Total	7815	100%
March 2022	Yes	0	0%
	No	4000	100%
	Total	4000	100%
Total	106647		

It was noted from table (2) that:

- The Number of people infected with COVID before taking the COVID-19 vaccine in April 2021 (92) and 2.8% of the total beneficiaries of the COVID- 19 vaccine in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia, While the number of people without COVID before taking the COVID-19 vaccine for April (3199) and 97.2%.
- The Number of people infected with COVID before taking the COVID-19 vaccine in May 2021 (263) and 2.4% of the total beneficiaries of the COVID- 19 vaccine in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia, While the number of people without COVID before taking the COVID-19 vaccine for may (10705) and 97.6%.
- The Number of people infected with COVID before taking the COVID-19 vaccine in June 2021 (189) and 2.8% of the total beneficiaries of the COVID- 19 vaccine in the vaccination



- centers of the University Hospital in the Kingdom of Saudi Arabia, While the number of people without COVID before taking the COVID-19 vaccine for June (6611) and 97.2%.
- The Number of people infected with COVID before taking the COVID-19 vaccine in July 2021 (310) and 1.4% of the total beneficiaries of the COVID- 19 vaccine in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia, While the number of people without COVID before taking the COVID-19 vaccine for July (22134) and 98.6%.
 - The Number of people infected with COVID before taking the COVID-19 vaccine in August 2021 (628) and 4.3% of the total beneficiaries of the COVID- 19 vaccine in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia, While the number of people without COVID before taking the COVID-19 vaccine for August (14029) and 95.7%.
 - The Number of people infected with COVID before taking the COVID-19 vaccine in September 2021 (129) and 2.1% of the total beneficiaries of the COVID- 19 vaccine in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia, While the number of people without COVID before taking the COVID-19 vaccine for September (5952) and 97.9%.
 - The Number of people infected with COVID before taking the COVID-19 vaccine in April 2021 (92) and 2.8% of the total beneficiaries of the COVID- 19 vaccine in the vaccination centers of the University Hospital in the Kingdom of Saudi



- Arabia, While the number of people without COVID before taking the COVID-19 vaccine for April (3199) and 97.2%.
- The Number of people infected with COVID before taking the COVID-19 vaccine in October 2021 (7) and 0.2% of the total beneficiaries of the COVID- 19 vaccine in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia, While the number of people without COVID before taking the COVID-19 vaccine for October (4425) and 99.8%.
 - The Number of people infected with COVID before taking the COVID-19 vaccine in November 2021 (0) and 0% of the total beneficiaries of the COVID- 19 vaccine in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia, While the number of people without COVID before taking the COVID-19 vaccine for November (521) and 100%.
 - The Number of people infected with COVID before taking the COVID-19 vaccine in December 2021 (208) and 2.5% of the total beneficiaries of the COVID- 19 vaccine in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia, While the number of people without COVID before taking the COVID-19 vaccine for December (8045) and 97.5%.
 - The Number of people infected with COVID before taking the COVID-19 vaccine in January 2022 (736) and 4.2% of the total beneficiaries of the COVID- 19 vaccine in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia, While the number of people without COVID before taking the COVID-19 vaccine for January (16649) and 95.8%.



- The Number of people infected with COVID before taking the COVID-19 vaccine in February 2022 (0) and 0% of the total beneficiaries of the COVID- 19 vaccine in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia, While the number of people without COVID before taking the COVID-19 vaccine for February (7815) and 100%.
- The Number of people infected with COVID before taking the COVID-19 vaccine in March 2022 (0) and 0% of the total beneficiaries of the COVID- 19 vaccine in the vaccination centers of the University Hospital in the Kingdom of Saudi Arabia, While the number of people without COVID before taking the COVID-19 vaccine for March (4000) and 100%.

8- Conclusions:

This research concludes the function of the COVID-19 Vaccination Center at the Local University Hospital in Saudi Arabia by referring to the data of the recipient of the COVID-19 vaccine at the Hospital Vaccination Centers of the University of Saudi Arabia from April 2021 to March 2022.

Research findings found that the number of recipients of the COVID-19 vaccine during the pandemic period (106647) Health care personnel working at Saudi health care centers as well as others from Saudis and others, indicating that despite their fears of the vaccine, people had little confidence in the vaccine in the beginnings. However, vaccination has been shown to help reduce COVID-19-related deaths, serious diseases and COVID



transmission. A large portion of the vaccinated population also protects those at risk of infection after vaccination.

Based on the findings of the study, it remains to propose a number of practical recommendations inspired by the findings, namely:

- 1- Highlighting the role of 19 COVID vaccination centers for all workers and employees, where all workers in all sectors are immunized in accordance with the modernization of the situation in the application of our mandate.
- 2- The need to observe the use of personal protections such as surgical muzzles and medical robe when dealing with new arrivals.
- 3- The need to comply with the wearing of face protectors and gloves, as well as the surgical sleeve of health practitioners and staff at the University Hospital in the Kingdom of Saudi Arabia.
- 4- The need to highlight the efforts made by the University Hospital in curbing the 19 COVID pandemic and the role of the hospital in activating vaccination centers and health personnel, as well as other Saudi and other individuals.



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