

# Attitudes Towards COVID-19 Vaccines In Basrah University Students

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## Abstract

The coronavirus disease (COVID-19) pandemic has impacted everyone, including students. Accurate information about the disease, its spread, preventive measures and government-issued advisories is critical for containing an outbreak. One of the key strategies to stop the increase of coronavirus disease 2019 (COVID-19) cases is vaccine. Objective of the study to assess attitudes towards COVID-19 vaccines among Basra University students. The study was descriptive cross sectional study questionnaire was used for the purpose of the data collection. The projects carried out in university of basrah .the study started from December 2021 to January 2022. The number of the sample is 484 students from all college 202 male and 282 female. The questionnaire divided in to Main parts, the first part was to identify the demographic characteristics include gender, age, marital status and the place of residence and Second part consist of 20 questions 8 multiple choices.

The last part includes the scientific axis consisting of 12 yes or no questions about the knowledge of the vaccine, the safety of the vaccine, and the impact of communication sites on the attitude towards the vaccine. The data was collected by Fill out the questionnaire while attending. Before any attempt for data collection, the study was approved and presented to experts.

Showed that the number of participating female students is higher than males by 58% for females compared to 42% for males. The percentage of students who live inside the city center was 44% and outside the city center was 56%.on other hands the percentage of single students 93% higher than married.

Represents the frequency of participants' responses to the situation questions. The trend was positive towards taking the vaccine, as the percentage of those vaccinated was 92%, while the percentage of those who were not vaccinated was 8%.In the case of the type of vaccine, the percentage of students who received the Pfizer vaccine was 73%, Sino pharm 16% and AstraZeneca 3%.

The percentage of students receiving single doses was 26%, while the percentage of students receiving two doses was 66%.In case of infection, the percentage of students infected before the vaccination was 35%, while the percentage of infection after the vaccination was 4%.on other hand The symptoms of the vaccine that appeared on the students were fever 40%, headache 38%, tiredness and lethargy 55%, nausea 10%, cough 5%, shortness of breath 9%.

**Keywords:** - Attitudes towards; COVID-19 vaccines; Basrah University students.

## Introduction

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic is one of the most important health challenges of the last century and is producing significant psychological, social and economic consequences .To date, there is still no definitive treatment for this viral respiratory infection, so prevention is essential [1].

Since coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), was first described based on a cluster of cases in China, there have been more than 236 million confirmed cases of COVID-19, including 4.8 million deaths, and the disease has caused an ongoing global pandemic .Preventive measures such as social distancing, quarantining, and wearing masks, have become an essential part of daily life, and this pandemic has affected a wide range of people's lives, including

mental, physical, and social aspects .To eliminate this pandemic, widespread vaccination against COVID-19 has been regarded as a promising measure[2].

Vaccines are one of the most reliable and cost-effective public health interventions ever implemented that are saving millions of lives each year [3].There is no doubt about the usefulness of the vaccine; however, in addition to vaccination other hygiene measures, such as surface disinfection practices, hygienic sanitary measures such as hand hygiene and the use of a hydro alcoholic solution, as well as physical and social distancing and/or wearing masks, are necessary. Even though all of these measures have been useful since the beginning of the pandemic, their efficacy could be underestimated due to the appearance of vaccines, which are considered to be the most effective measure for achieving definite control of the virus [1].

The Government of Iraq had started the vaccination campaign on March 25, 2021 and as of February 13, 2022, nearly 9 million people have been vaccinated with at least one dose. However, one of the major threats to the coverage of vaccines and successful mitigation of the pandemic is vaccine hesitancy. Vaccine hesitancy was defined by the WHO Strategic Advisory Group of Experts as "delay in acceptance or refusal of vaccination despite availability of vaccination services"." Uncertainty and unwillingness to receive COVID-19 vaccine will be a significant challenge in accomplishing the vaccination coverage required for population immunity. Vaccine hesitancy is associated with several factors and is present worldwide and has been labelled as one of the ten threats to global health in 2019 .The main reasons to decline the vaccines were the thought that it was produced in a hurry, may have side effects, doubt about the efficacy of the vaccines, and also many people believe that they have already developed immunity against the virus [4].

High vaccination coverage rates are particularly necessary in the context of the current COVID-19 pandemic, to enable indirect protection of society as a whole, return society to a normal lifestyle, and reopen the global economy .High vaccination rates are also essential in achieving herd immunity in order to reduce transmission of COVID-19 and create a low risk of infection among the general population and those most susceptible to transmission [5]. Teachers are the main caregivers and the first line of protection for school children. Their role complements that of parents. During

school hours, school teachers are actually the first-respondent in cases of disasters or emergencies. They must be able to deal properly with health emergencies both in normal children, and those children with special health care needs [8].

### **The importance of study:**

Students are one of the most vulnerable subpopulations to the COVID-19 pandemic due to their insufficient ability to self-protect from infectious diseases. Therefore, it is important to understand attitudes toward COVID-19 vaccines in this subpopulation to achieve the public health goals of vaccination programs.

### **The aims of study:**

To assess attitudes towards COVID-19 vaccines among Basra University students.

### **Methodology:**

Setting of the project: the projects carried out in university of basrah .the study started from December 2021 to January 2022.

Sample of the project: the number of the sample is 484 students from all college 202 male and 282 female.

### **Project instruments:**

The questionnaire divided in to Main parts, the first part was to identify the demographic characteristics include gender, age, marital status and the place of residence and Second part consist of 20 questions 8 multiple choice.

The last part includes the scientific axis consisting of 12 yes or no questions about the knowledge of the vaccine, the safety of the vaccine, and the impact of communication sites on the attitude towards the vaccine. The data was collected by Fill out the questionnaire while attending, before any attempt for data collection, the study was approved and presented to experts.

### **Statistical Data Analysis:**

The data were analyzed using the Statistical Package for Social Sciences (SPSS), version 26.

For data analysis

1- Percentage.

2-Frequency.

3-mean of score were used

### **Results of the Study**

**4-1 Distribution of the Variables Related Demographic Characteristics N=484 Students**

Statistics		Frequency	Percent
Sex	Female	282	58 %
	Male	202	42 %
	Total	484	100 %

Statistics		Frequency	Percent
Living	City center	212	44 %
	Out center	272	56 %
	Total	484	100 %

Statistics		Frequency	Percent
Social statue	Single	449	93 %
	Married	35	7 %
	Total	484	100 %

**Table (4-1)**

The result of Table (4- 1) showed that the number of participating female students is higher than males by 58% for females compared to 42% for males. The percentage of students who live inside the city center was 44% and outside the city center was 56%. On other hands the percentage of single students 93% higher than married.

**4-2 Results of the Vaccination Attitudes for the sample N=484 Students**

Statistics		F	%
Vaccine	No	38	8 %
	Yes	446	92 %
	Total	484	100 %

Statistics		F	%
Type of Vaccine	No	38	8 %
	Pfizer	353	73 %
	Sino pharm	77	16 %
	AstraZeneca	16	3 %
	Total	484	100 %

Statistics		F	%
Dose	No	38	8 %
	Single dose	124	26 %
	Two doses	322	66 %
	Total	484	100 %

Before vaccine		F	%
Infection	No	314	65 %
	Yes	170	35 %
	Total	484	100 %

After vaccine		F	%
Infection	No	465	96 %
	Yes	19	4 %
	Total	484	100 %

Symptoms		Frequency	Percent
Fever	No	289	60 %
	Yes	195	40 %
	Total	484	100 %
	No	301	62 %

Headache	Yes	183	38 %
	Total	484	100 %
tiredness and lethargy	No	218	45 %
	Yes	266	55 %
	Total	484	100 %
Nausea	No	437	90 %
	Yes	47	10 %
	Total	484	100 %
Cough	No	459	95 %
	Yes	25	5 %
	Total	484	100 %
Shortness of breath	No	443	91 %
	Yes	41	9 %
	Total	484	100 %

**Table (4-2)**

Table (4-2) represents the frequency of participants' responses to the situation questions. The trend was positive towards taking the vaccine, as the percentage of those vaccinated was 92%, while the percentage of those who were not vaccinated was 8%.

In the case of the type of vaccine, the percentage of students who received the Pfizer vaccine was 73%, Sino pharm 16% and AstraZeneca 3%.

The percentage of students receiving single doses was 26%, while the percentage of students receiving two doses was 66%. In case of infection, the percentage of students infected before the vaccination was 35%, while the percentage of infection after the vaccination was 4%. On other hand The symptoms of the vaccine that appeared on the students were fever 40%, headache 38%, tiredness and lethargy 55%, nausea 10%, cough 5%, shortness of breath 9%.

**4-3 Results the Assessment of knowledge about corona virus protection, N=484 Students**

Assessment of knowledge					
Question	N	Mean Score	Sd.	Variance	Ass.
Q1	484	0.73	0.443	0.196	Good
Q2	484	0.89	0.307	0.094	Good
Q3	484	0.70	0.459	0.210	Good
Q4	484	0.12	0.320	0.103	Weak
Q5	484	0.71	0.454	0.206	Good
Q6	483	0.37	0.485	0.235	Medium
Q7	484	0.54	0.499	0.249	Medium
Q8	484	0.68	0.465	0.217	Good
Q9	484	0.89	0.531	0.282	Good
Q10	484	0.87	0.339	0.115	Good
Q11	484	0.73	0.446	0.199	Good
Q12	484	0.62	0.487	0.237	Medium

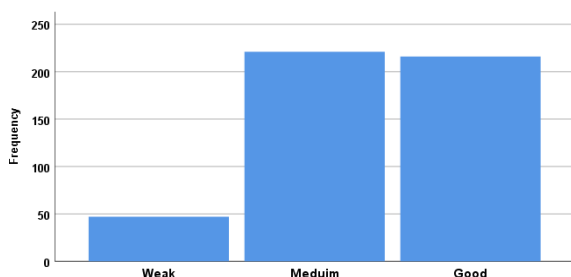
\*Weak = (0 – 0.33), medium = (0.34 – 0.67), good = (0.68 – 1) Mean Score

**Table (4-3)**

Mean Score assessment for sample						
Statistics	N	Min	Max	Mean Score	Sd.	Ass.
Knowledge	484	0.00	0.91	0.65	0.184	Medium

\*Medium = (0.34 – 0.67) Mean Score

Overall assessment of knowledge about protection from coronavirus			
Mean Score	F	%	Ass.
0 – 0.33	47	10 %	Weak
0.34 – 0.67	221	46 %	Medium
0.68 - 1	216	44 %	Good
<b>Total</b>	<b>484</b>	<b>100 %</b>	



**Figure 4.3.1** Overall assessment of knowledge about protection from covid-19(weak=10%, medium=46%, good=44%)

**Discussion**

This study was conducted for Basra University students to find out their attitudes towards the coronavirus vaccine. Various questions were asked to a number of Basra University students of both sexes (males and females).

Demographic information shows that the majority of students who answered the questionnaire 58% were female. The majority of the students participating in the study are from the out centre, at 56%. According to (Table 4\_1). Through the vaccination situation, the results were positive, as the percentage of vaccinated students reached 92%. The rate of infection with the Corona virus before vaccination was 35%, while the infection rate after vaccination was 4%. (Table 4\_2) Through the overall assessment of knowledge about protection from the Corona virus, the results medium 46%.44% good, Weak by 6%. (Table 4\_3)

According to a previous study examining the acceptability of COVID\_19 vaccines among adolescents in China, there were (75.59%) adolescents who would accept vaccination for COVID-19.[6] According to another research conducted in Saudi Arabia, 63.2% of males and 66.9% of females had a positive attitude towards taking the COVID-19 vaccine whenever it was available [7]. In a previous study, the general attitude towards the vaccine in Jordan was negative as it showed a low percentage (37.4%)[3], while it was noted that the Spaniards, 95%, had a positive

attitude. [1]

**Conclusion:**

A high rate of acceptance of COVID-19 vaccines was found among Basrah university students. However, vaccine uptake may be reduced by concerns about vaccine safety and efficacy. Alleviating these concerns and enhancing public confidence in vaccines are crucial for future immunization programs against the COVID-19 pandemic.

**Recommendation:**

We recommend health departments to give educational courses and seminars on removing fears of vaccination, and some points must be planted, the most important of which are:

- 1- Trust: A person's confidence in the effectiveness and safety of vaccines, the health services they provide, and the policymakers who decide to introduce them.
- 2- Conviction: whether or not a person considers the disease to be extremely dangerous to his health.
- 3- Calculation: the individual's participation in the comprehensive search for information that makes them weigh the risks and benefits of getting the vaccine.
- 4- Restrictions (or convenience): How easy it is for the person concerned to have access to the vaccine.
- 5- Collective responsibility: the desire to protect others from infection, through personal vaccination.

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