

Perspectives, Acceptance, and Hesitancy Among Male and Female Medical Students Regarding Vaccination for COVID-19 in Tishk International University

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ABSTRACT

Background and objectives: Vaccines are an important tool for halting the spread of pandemics such as COVID-19, influenza, etc. A COVID-19 immunization is an antibody expected to gain resistance against serious intense respiratory disorder Covid-19, the infection that causes COVID-19. This study aimed to identify how the among male and female medical students deal with vaccination of COVID-19 in TIU university.

Methods: A quantitative descriptive cross-sectional study design, this study was conducted in the Tishk International University from 19 September 2021 to 15 may 2022. Sample included 200 among male and female medical students in TIU University.

Results: The majority of their accepted taking the vaccine and encouraged others for that, most of them preferred the Pfizer vaccine, a majority of them had a positive attitude and good perspectives against the vaccine, majority of them agreed to take a safe vaccine after clinical trial, while 9% of them had hesitancy to take vaccine for COVID-19 especially among female students because of expected complications from COVID-19.

Conclusion: The majority of the male and female students agreed with taking the vaccine as primary prevention, while only 22% of them agreed that they may have problems with the vaccine. The majority of the 51% prefer the Pfizer vaccine. Only 31% of them accepted to take the vaccine at this time for themselves and their family. Most of them had a good attitude about the vaccine for prevention nearly 59% Only 9% of them had hesitancy to take the vaccine especially among female students because of complications.

Keywords: Perspectives, Acceptance, and Hesitancy, vaccination, COVID-19

INTRODUCTION

Vaccines are an important tool for halting the spread of pandemics such as COVID-19, influenza, etc. A COVID-19 immunization is an antibody expected to gain resistance against serious intense respiratory disorder Covid-19, the infection that causes Covid sickness 2019 (COVID-19). More than 100 candidates were in the run to produce the COVID-19 vaccine. Though the COVID-19 vaccine was launched on a fast track, it took entry into the market just nine months after the virus was identified¹. As the pandemic progresses, more successful latest vaccines are likely to be produced. However, it is essential to assess the people's acceptance of COVID-19 vaccinations for effectively delivering vaccines². To develop a COVID-19 vaccine to stop the disease's spread and devastating consequences by covering the maximum variant of the virus, more successful latest vaccines are likely to be produced. However, it is essential to assess the people's acceptance of COVID-19 vaccinations for effectively delivering vaccines³. There are no particular antiviral treatments for COVID-19. Compliance with social distancing and prolonged use of face masks is not guaranteed. Thus, vaccination has been critical in potentially putting an end to the COVID-19 epidemic. Therefore, despite its availability, the public acceptability of the COVID-19 vaccines created in a short time remains uncertain³. This hesitation is found worldwide. Concerns about the vaccine's efficacy or safety, the country of manufacture, antivaccine movements, and the belief in rushed vaccine research were vaccination hesitation causes, in addition to rumors and misinformation. Quickly, after the SARS-CoV-2 virus discovery, an extraordinary amount of work has been accomplished. The scientific community has initiated over 300 vaccine projects. Vaccines are now being evaluated in clinical trials; several have already received approval from the Food and Drug Administration (FDA), and others are being used in many countries. Additionally, they will be responsible for making vaccination recommendations and counseling vaccine-positive individuals at the heart of this COVID-19 pandemic⁴. The aim of the study was to identify how the medical students deal with vaccination of COVID-19. The specific objectives were:

1. To identify socio-demographic data: characteristics of the sample which include (age, sex, family status, address, and stage in the college).
2. To identify items of (perspectives, acceptance, and hesitancy) among male and female medical students.
3. To Identify positive or negative attitudes toward vaccination of COVID-19.

METHODS

The study was a quantitative descriptive, cross-sectional study design. conducted in medical and health Faculties at Tishk International University in Erbil, begun from 19 September 2021 to 15 May 2022.

Sample Size: The sample size included 200 among male and female medical students who had interesting to involve with the study, convenient sampling technique was used for data collection, the included criteria those medical students who had desire to participate and exclusion criteria included the first stage and those who have not trends in participation. (The first-year students were excluded from our study because they joined the faculty in late time.)

Data collection: The Data were collected by using the valid questionnaire format through the self-report by male and female medical students in the medical departments. The questionnaire consisted of four main parts. part one is related to socio-demographic characteristics of the Sample which includes (age, sex, family status, address, and stage in the college) The second part consisted of items related to their perception of the scoring system as (1 for agree,2 for neutral, and 3 for not agree), Part three included items related to acceptance (1 for agree,2 for neutral, and 3 for not agree).part four related items about hesitancy for vaccine included (1 for agree, 2 for neutral, and 3 for no agree). Direct interviews (Face-to-face and self-report) were used for data collection. The researchers introduced the purpose of the study and they ask for any comments that lead to not being interesting to participate in the study the researchers will promise to keep the information confidential. The permission was taken from the college of nursing and Tishk International University, and also acceptance from each faculty (Dentistry, Pharmacy, Medical Analysis, and Nursing) for the study. The data were analyzed through the application of SPSS program version 23.

RESULTS

The Sociodemographic characteristics of the study as followings (most of them were female, single, from faculty dentistry and second class). The majority of them had good perspectives about vaccine nearly 77% so most of them agree to take fizzer vaccine and encourage public to take vaccine. This result shown in Figure 1.

Table 1 Sociodemographic characteristics of the participants.

Variable		Frequency	Percent (%)
Age	18-24	200	100%
Gender	Male	90	45%
	female	110	55%
Marital status	single	198	99%
	married	2	1%
College	Faculty of Dentistry	72	36%
	Faculty of Pharmacy	62	31%
	Faculty of Science (department of Medical Analysis)	36	18%
	Faculty of Nursing	30	15%
	Stage	Second	72
	Third	62	31%
	Forth	40	20%
	Fifth	20	10%
Total		200	100%

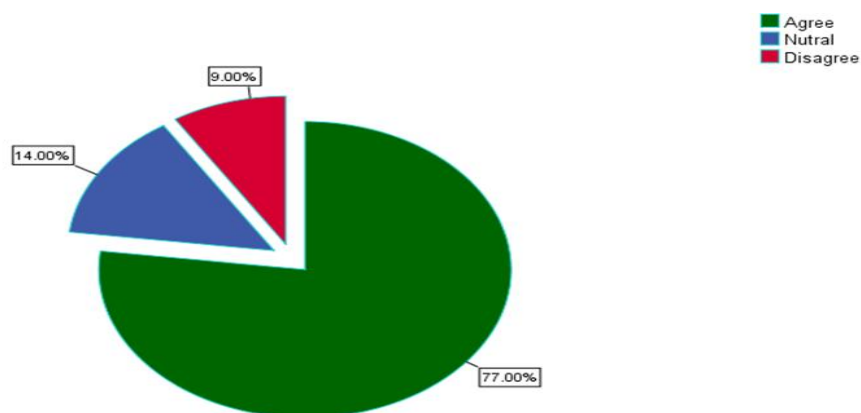


Figure 1 taking Pfizer vaccine and encouraging the public to take the vaccine.

Only about 31% accepted to take vaccine directly. This result shown in Figure 2.

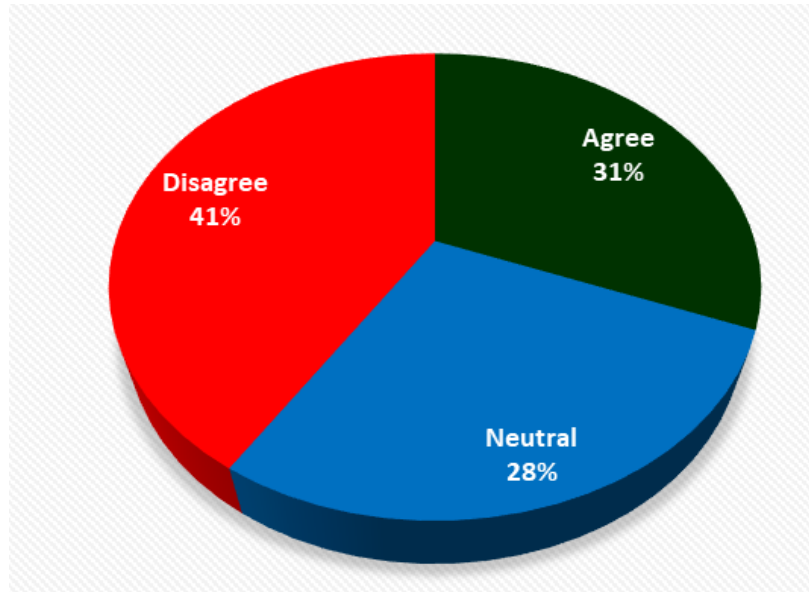


Figure 2 Taking vaccine directly.

Most of them have positive attitude regarding vaccine which was about 59%. This shown in Figure 3.

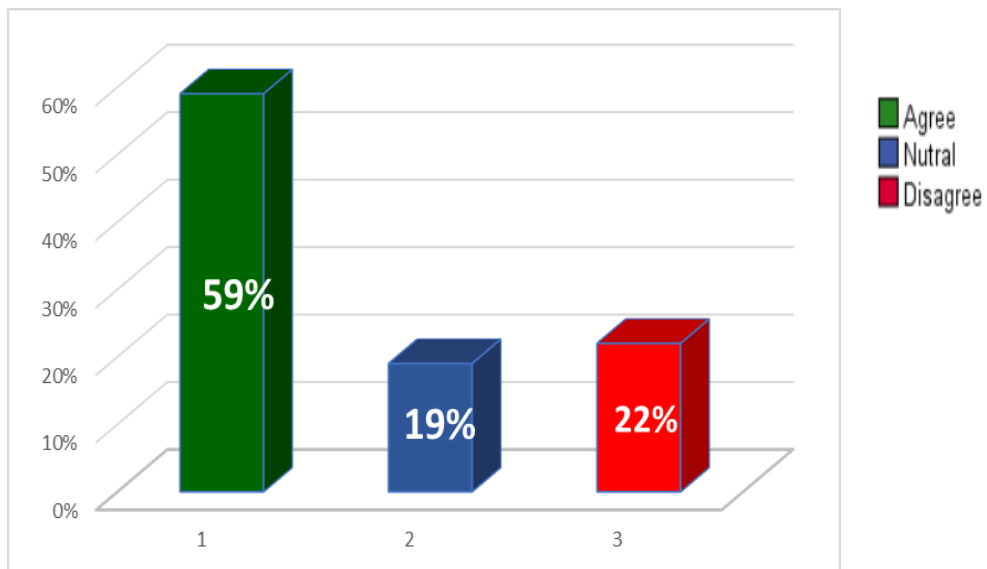
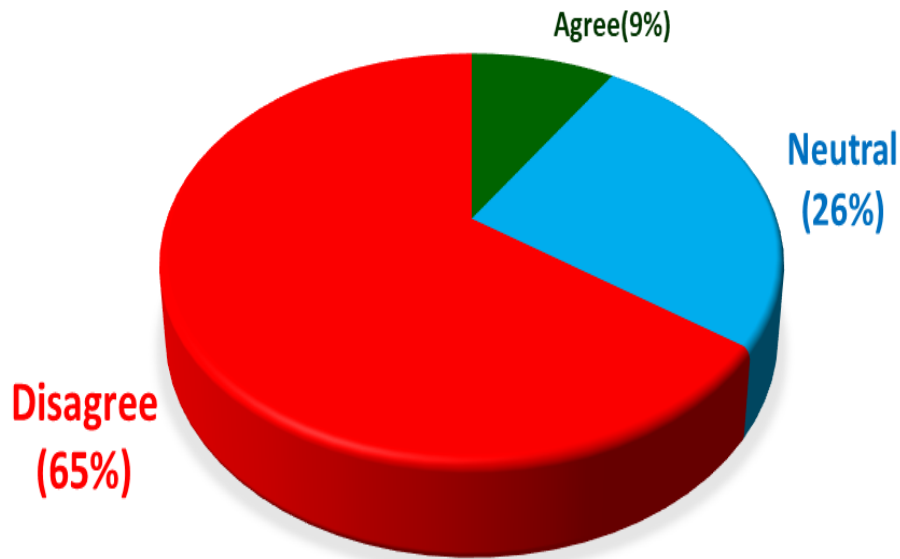


Figure 3 Attitude regarding vaccine.

Only 9% of them had hesitancy regarding take vaccine especially among female. This shown in Figure 4.

Figure 4 Hesitancy regarding taking vaccine.



DISCUSSION

Regarding the acceptance the findings of the study revealed that majority of participants prefer vaccination for prevention from COVID-19 nearly about 77%. This finding was agreed with the study done by⁵. The other findings of the study revealed that 76% of them accepted to encourage others to take vaccine this finding agrees with the study done by⁶. The majority of them prefer the type of Pfizer to take because they expected that it is safer and preventive from COVID-19 this was accepted with the study done by⁷. The other findings revealed that most of them agree to take the vaccine and help the local government to educate the public for prevention it was similar to the study done by⁸. The outcome of the study revealed that the majority of them have positive perception and attitude about vaccine so they can take and encourage their family to take also these findings agreed with the study done by⁹. Regarding hesitancy about taking vaccine most of them disagree with take the vaccine as a mandatory especially female students, and some of them accepted to take vaccine after finishing the clinical trial for each vaccine so for that reason most of female students not agreed to take the unsafe vaccine because of complications may occur especially during pregnancy so these findings were similar with a study done by¹⁰ and agreed with the study by¹¹. The majority of male and female medical students had good perspectives about vaccines therefore they are responsible to educate the public

about the benefit of vaccines to protect from COVID-19 during the outbreak of pandemic diseases or epidemic diseases to increase awareness of female in Kurdish society for using safety measures and other precatory prevention. The findings of the study were similar with other studies done by the others as^{12,13,14} and^{15,16,17}.

CONCLUSION RECOMMENDATIONS

The majority of the male and female medical students agreed with taking a vaccine as primary prevention while only 22% of them approved about may have problems with vaccines. The majority of the 51% prefer the Pfizer vaccine. Only 31% of them accepted to take the vaccine at this time for themselves and their family. Most of them had a good attitude about the vaccine for prevention nearly 59% while only 9% of the female and male students had hesitancy to take the vaccine because of complications. Encouraging female and male students and women as general in Kurdish society to protect themselves from Covid-19 by wearing a mask and social distancing, good sleep, diet, and exercise. Increase social awareness of COVID- 19 and its complications via mass media seminars, workshops, and lectures.

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