The Distinction Between Male and Female Attitudes Toward COVID-19 Vaccination

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Abstract To effectively contain the COVID-19 pandemic, herd immunity must be attained, which necessitates a high vaccination rate. Despite the value of immunization, some people are still reluctant or unwilling to get the COVID-19 vaccine. In order to create community immunity and a successful future pandemic response, it is necessary to understand adults' intentions towards the COVID-19 immunization.. The aim of this study to examine the distinction between men and women attitudes towards coronavirus vaccine . Methods cross-sectional survey is conducted in this study and (nonprobability convenience sampling technique) is used for collecting data. Total samples of (400) adult person has been taken in (200) participants were taken from Al-Diwaniyah Teaching Hospital, (155) participants were taken from Public Health Center, (45) participants were taken from Orouba Preparatory School the current study. The samples are assessed attitudes adult community towards the COVID-19 Vaccination through a questionnaire. : The results of the current study have their no different between male and female in their attitudes toward Corona Virus vaccine.

1. INTRODUCTION

Late in 2019, Wuhan city, China, saw the appearance of the novel coronavirus illness 2019 (COVID-19), which quickly spread to cause a global pandemic (S. Ghosh, 2022). Over 200 nations around the world have reported confirmed cases and fatalities. The World Health Organization (WHO) reported that as of May 23, 2023, COVID-19 had caused more than 766 million cumulative cases and more than 6.9 million fatalities worldwide 1 .Travel bans, quarantines, and other limitations have all been brought on by this pandemic, which has also caused enormous losses and broad socioeconomic suffering worldwide. The COVID-19 pandemic was slowed down and eventually ended thanks in large part to vaccination programs that were implemented as part of ongoing efforts to stop its spread [12–14]. The WHO issued an urgent appeal for COVID-19 vaccine research and development as a result, not long after the disease's epidemic was declared 2.

A number of vaccines, including those made by Moderna, Pfizer/BioNTech, and AstraZeneca, have been approved by the WHO as a result of the COVID-19 pandemic's. Exceptional efforts to accelerate and scale vaccine research and development vaccine hesitancy continued to be a problem despite these advancements, with vaccine rejection being reported globally and impeding the high immunization rates required to achieve herd immunity 3.

Studies have indicated that immunization against tuberculosis, poliomyelitis, diphtheria, tetanus, and measles annually saves 2.5 million lives around the world Immunization programs have greatly decreased morbidity and death globally 4 .To safeguard the entire world civilization from the terrible morbidity and mortality caused by the severe corona virus, it is urgently necessary to develop safe and effective vaccines and immunize as many people as possible 5. Numerous studies revealed that vaccination reluctance was higher in women, younger age groups, and those with lower education levels. Vaccinations have since become the most crucial public health strategy for preventing the spread and harm caused by severe diseases and consequences 6. The severity of COVID-19 becomes apparent in older adults who have chronic illnesses like hypertension, diabetes mellitus, chronic respiratory conditions, and other health issues that have a detrimental impact on immunity and cause complications. Additionally, virus mutilations lead to confusion in infection care, which raises complications and fatality rates 7.

2. MATERIALS AND METHODS

2.1 Design of the Study

cross-sectional (survey study) has been conducted in the current study. It has male and female the private attitudes toward COVID-19 vaccination in Al-Diwaniyah City starting between 15 th August to10th April 2023.

2.2 Sample and Sampling of the Study

Non probability sampling technique (Convenience) samples of (400) adult person has been taken in (200) participants were taken from Al-Diwaniyah Teaching Hospital , (155) participants were taken from Public Health Center , (45) participants were taken from Orouba Preparatory School the current study.

2.3 Ethical Consideration

Participants have received information about the study and its objectives, and their consent to be volunteers has been taken with consideration of confidentiality. Permission for conducting this study has been obtained from the ethical committee in Faculty of medicine, this is one of the most basic principles before gathering the data, to protect the participants values and dignity.

2. 4 The Study Instrument and Data Collection

To achieve the aims of the study, Instrument was developed after reviewing the relevant studies that concerning with attitudes toward COVID-19 vaccination , and this questionnaire has two parts, which are explained in the following Questionnaire, The Questionnaire consists of two parts :Part 1: Demographic Data This part is concerned with participants socio- demographic data. A demographic data sheet, that consists of (7) items, which contain (age, marital status, educational level, monthly income, residency, gander , occupation) .Part II: Attitudes Toward COVID-19 : This part is concerned with the collection of general information about COVID-19 vaccination , consist of 35 items including attitudes adult community towards the COVID-19 vaccination (Al-Sanafi at el.,2021) .

2.5 Statistical Analyses

Descriptive statistics: (Frequency and percentage tables; mean and standard deviation). Inferential Statistics: (Chi-square test to retest).

3. STUDY RESULTS

Table (1) Descriptive Statistic Study Sample Demographic Data (n=349)

Items	Sub-groups	Frequency	Percentage
Age / years	18-25	179	51.3
	26 – 33	79	22.6
	34 – 41	29	8.3
	42 – 49	61	8.9
	50+	61	8.9
	Total	400	100.0
Gender	Male	164	35.2
	Female	236	64.8
	Total	400	100.0
Marital status	Married	158	45.3
	Single	158	45.3
	Widowed	11	3.2
	Divorced	6	1.7
	Separated	16	4.6
	Total	400	100.0
Monthly income	Less than 300000	79	22.6

	600000-300000	159	45.6
	601000-900000	64	18.3
	1200000- 901000	7	2.0
	1500000- 1200000	10	2.9
	1501000 and more	30	8.6
	Total	400	100.0
Residence	Urban	203	58.2
	Rural	146	41.8
	Total	400	100.0
Levels of education	Unable to read and write	63	18.1
	Read and write	37	10.6
	Elementary school graduate	32	9.2
	Middle school graduated	77	22.1
	High school graduate	62	17.8
	Diploma	41	11.7
	Bachelor degree and above	37	10.6
	Total	400	100.0
Occupation	Governmental employee	68	19.5
	Unemployed	103	29.5
	Housewife	44	12.6
	Retired	6	1.7
	Student	128	36.7
	Total	400	100.0

Table (2) *Association between overall attitudes of male and female toward covid-19 vaccination and their demographic data (n=490).*

Demographic Data	Chi-Square Value	D.F.	P-Value	Sig /N. Sig.
Age/Years	46.622	12	.000	S
Gender	6.695	3	.082	N
Marital status	53.134	12	.000	S
Residence	18.927	3	.000	S
Economy	97.688	15	.000	S
Education Levels	60.491	18	.000	S
Occupation	94.070	12	.000	S
d.f: Degree of freedom, p: Probability value; NS: Non-significant at p≥0.05, S: significant at p <0.05.				

4. DISCUSSION:

Throughout the course of the data analysis of the current research, the results display that the highest percentage of the age of the subgroups of adult community are: adult with ages (18-25) years old with (51.3%). Because the places where the sample was collected, most of them are students, so their ages range between (18-25). This result agrees with the previous study that was performed by 8. Regarding the gender, the results of study reveals that the female adult community percentage was (64.8%) while male adult community' percentage was (35.2%) because most of the sample were women and always have views and share to know more details about the COVID-19 vaccination , which is more in women.

This result agrees with the previous study that was conducted by 9 , regarding to residence, the current study found that the percentage of study sample who live in urban areas was about (58.2%). Perhaps as a result of the high population density in urban areas and the migration of people from rural areas to towns, this image of Iraqi society is more plausible. This result is consistent with the previous study conducted by 10, Regarding the marital status, adult who are married were (45.3%) .This finding maybe since the age are participants matched with marriage, and this age is considered as suitable in our culture for marriage. This result agrees with 11, Regarding the level of education, adult community are show Middle school graduated   were (22.1%).%), this result is agreement with the result of 12 , In this study, the monthly income shows that the adult community with roughly (600000-300000) monthly income recorded (45.6%). This result is agreement with the result of 13. . Table (2) Association between overall attitudes of male and female toward covid-19 vaccination and their demographic data. The present study shows the association between the overall attitudes of adult community toward COVID-19 vaccination and their demographic data were a significant association (P<0.05) except: gender in which there was a non-significant association (P>0.05) with attitudes of adult community

toward covid-19 vaccination. Regarding age, the attitudes level is significantly among the group (18-25) year, compared to other groups. This outcome can be interrupted as: this category does not have enough knowledge about how to attitudes COVID-19 vaccination. The study is similar with 12. With relation to gender, females had a non-significantly about to attitudes COVID-19 vaccination higher level than males. This agrees with the study 13 ..Regarding to the marital states, This finding corresponds with a cross-sectional study conducted by 14. Regarding residence, the majority of respondents (58.2%) reside in urban areas had significantly with attitudes toward COVID-19 vaccination. This finding corresponds with a cross-sectional study conducted by 15. Regarding income the results a significant with attitudes toward COVID-19 vaccination. This finding corresponds with a cross-sectional study conducted by 16. Regarding education the results a significant with attitudes toward COVID-19 vaccination. This finding corresponds with a cross-sectional study conducted by 17, Regarding Occupation the results a significant with attitudes toward COVID-19 vaccination. This finding corresponds with a cross-sectional study conducted by 18.

5. CONCLUSION

This study's findings showed that a COVID-19 immunization had a low acceptance rate. The community's assumption that immunization will halt the pandemic, chronic sickness, and income should all be taken into account when determining how accepting of the COVID-19 vaccinations a population is. The characteristics of the COVID-19 vaccine may have an impact on localized interventions and tactics aimed at enhancing community attitudes about immunization and their no distinction between male and female in their attitudes toward Corona Vrus vaccine.. The government ought to work with other stakeholders to implement community awareness of the advantages of the vaccine distributed through various media in order to increase community acceptance of the COVID-19 immunization .

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