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NURSE'S ATTITUDES AND ACCEPTANCE TOWARD COVID-19 VACCINATION AT BASRAH SPECIALIST HOSPITAL FOR CHILDREN IN BASRAH CITY

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Abstract

Across sectional study design was used in the present study which conducted at Basrah Specialist Hospital for Children in Basrah City in order to detect nurse's attitudes and acceptance toward COVID-19 vaccination . The period of the study extended from 1 of August to 1st of November, 2021. A non - probability purposive sample of (50) nurses was selected from different wards in Basrah Specialist Hospital for Children . A closed- ended questionnaire composed of three parts which measure nurse's attitudes and acceptance toward COVID-19 vaccination. Results of the study show that (16%) of nurses had low attitudes, (56%) had moderate attitude , and (28%) had high attitude toward COVID-19 vaccination. In addition, the results of study explains that (2%) of nurses had low acceptance, (46%) had moderate acceptance and (52%) had high acceptance toward COVID-19 vaccination. The vast majority of nurses had moderate attitudes and high acceptance toward COVID-19 vaccination .

Keywords: *Nurse's Attitudes, Nurse's Acceptance, COVID-19 Vaccination*

Introduction:

Since December 2019, when the SARS-CoV-2 coronavirus was first reported in Wuhan, China, the pandemic has infected more than 160 million people and claimed more than 3.3 million lives. Development of a vaccine is considered a pivotal moment in the efforts to curb disease spread and begin the resumption of normalcy in everyday life ⁽¹⁾.

The World Health Organization identified vaccine hesitancy as one of the top ten global health threats in 2019. Misinformation, lack of trust in key industry players and poor communication with populations have been the drivers of this trend over the past 15 years ⁽²⁾. Locally, understanding vaccine hesitancy and its determinants is important to enhance the effect of vaccination strategies, as outcomes can be affected by local factors related to the given contexts, vaccines, and populations. Identifying the determinants of vaccine hesitancy in the hesitant subgroup and then tailoring the vaccination campaign to fit this subgroup is essential ⁽³⁾.

As of 18 February 2021, at least seven different vaccines across three platforms have been distributed globally according to the World Health Organization ⁽¹⁾. Vaccination consider an important factor in order to control the global pandemic of COVID-19. The most hopeful way of controlling COVID-19 could be universal vaccination to achieve herd immunity⁽⁴⁾. The public's attitudes towards vaccine were unclear and affected by many factors, making the achievement of herd immunity a challenge ⁽⁵⁾. Among the public, healthcare workers will be key to the success of COVID-19 vaccination ⁽⁶⁾. Serving as a trusted source of vaccination information, healthcare workers recommendations play a infection⁽⁷⁾. As major role in patients' vaccination decisions. During the COVID-, health care workers are at high risk of all individuals and networks included within them are working to disseminate information via the Internet Is one of the world's most widely distributed communications networks that allows community members to exchange messages and data, making the world a small village where anyone anywhere in the world can communicate with others anywhere through a small device like a computer or mobile phone. Despite the rapid growth of internet users in recent years, come questions are posed regarding its effects on humans since improper use of the Internet has caused users to develop problematic behaviors and exhibit many psychological effects ⁽¹³⁾

Methodology

Design of Study

A cross - sectional study design was used in the present study which conducted at Basrah Specialist Hospital for Children in Basrah City in order to detect nurse's attitudes and acceptance toward COVID-19 vaccination. The period of the study extended from 1 of August to 1st of November, 2021

Ethical Considerations

The researchers explained the purpose of the study for every nurse before participation. Nurses were assured that the study maneuver will cause no actual or potential harm to study sample. Oral consent was obtained from every nurse prior to data collection.

Setting of the Study

This study was conducted at different wards in Basrah Specialist Hospital for Children in Basrah City in order to detect nurse's attitudes and acceptance toward COVID-19 vaccination

Instrument of Study

The tool of the study is closed- ended questionnaire composed of three parts which measure nurse's attitudes and acceptance toward COVID-19 vaccination. Mainly it was involved:

Part 1: Socio- demographic Characteristics: This part is concerned with the collection of demographic data obtained from the participants through face to face interview. It includes (9) items relative to age, gender, marital status, level of education, years of experience, previous worke in the COVID-19 isolation hospital, direct dealing with COVID-19 patient, previously infected with COVID-19, and family member infected or died with COVID-19.

Part 2: This part of the questionnaire consists of (12 questions) concerning nurse's attitudes toward COVID-19 vaccination

Part 3: This part of the questionnaire consists of (13 questions) concerning nurse's acceptance toward COVID-19 vaccination

Sample of Study

A non - probability purposive sample of (50) nurses was selected from different wards in Basrah Specialist Hospital for Children in order to detect attitudes and acceptance toward COVID-19 vaccination.

Inclusion Criteria

All nurses from different wards who agree to participate in the present study.

Exclusion Criteria:

1. Nurses who refused to participate in the present study.
2. Nurses who working in pandemic ward.

Data collection

Data collection was performed by direct interview with sample of study. The Implementation was carried out at Basrah Specialist Hospital for Children in Basrah city from 5th to 9th of September, 2021.

Statistical analysis

The data were analyzed by statistical package for social sciences. The information of the study was presented as frequency and percentage.

Results

Table(1): Characteristics of Study Participants

Variables	Group	F	%
Age	20-29	36	72.0
	30-39	4	8.0
	40-49	6	12.0
	More than or equal to 50	4	8.0
	Total	50	100.0
Mean ± SD 1.56 ± 0.993			
Gender	Male	15	30.0
	Female	35	70.0
	Total	50	100.0
Marital Status	Single	14	28.2
	Married	35	70.0
	Widow	1	2.0
	Total	50	100.0
Level of Education	Preparatory	14	28.0
	Diploma	14	28.0
	Bachelor	22	44.0
	Total	50	100.0
Years of experience	Less than 10	38	76.0
	10-19	5	10.0
	20-29	4	8.0
	More than or equal to 30	3	6.0
	Total	50	100.0
Mean ± SD 1.44 ± 0.884			
Previously infected with COVID-19	Yes	29	58.0
	No	21	42.0
	Total	50	100.0
Previously working in the COVID-19 isolation hospital	Yes	8	16.0
	No	42	84.0
	Total	50	100.0
Dealing directly with COVID-19 patient	Yes	41	82.0
	No	9	18.0
	Total	50	100.0
Have a family member infected or died with COVID-19	Yes	22	44.0
	No	28	56.0
	Total	50	100.0

F=Frequency, %= Percent

Results of demo-graphic data in this table revealed that 72% of sample aged (20-29) years. More than half of participants were female with percentage (70%). Also, the results show that married participants were (70%). Regarding to educational level, nurses with bachelor level of education were (44%) and (76%) of participants had years of employment less than 10 years. In addition, the results revealed that (58%) of participants were infected with COVID-19 previously, (84%) were not working in the COVID-19 isolation hospital, (82%) were dealing directly with COVID-19 patient, (56%) of participants had not a family member infected or died with COVID-19.

Table(2): Nurse's Attitudes Concerning COVID-19 Vaccination

Level of Attitude	F	%	M	S.D	Assess
Low	8	16.0	0.57	0.23	Moderate
Moderate	28	56.0			
High	14	28.0			
Total	50	100.0			

F=Frequency, %= Percent, Ass: Assessment, M: Mean, S.D: standard deviation, Low(0-0.33), Moderate(0.34-0.67), High(0.68-1)

Results of study in this table show that (16%) of participants had low attitude concerning COVID-19 vaccination, (56%) had moderate attitude concerning COVID-19 vaccination, and (28%) had high attitude concerning COVID-19 vaccination

Table(3): Nurse's Acceptance Concerning COVID-19 Vaccination

Level of Acceptance	F	%	M	S.D	Assess
Low	1	2.0	0.64	0.18	Moderate
Moderate	23	46.0			
High	26	52.0			
Total	50	100.0			

F=Frequency, %= Percent, Ass: Assessment, M: Mean, S.D: standard deviation, Low(0-0.33), Moderate(0.34-0.67), High(0.68-1)

Results of study in this table revealed that (2%) of participants had low acceptance concerning COVID-19 vaccination, (46%) had moderate acceptance concerning COVID-19 vaccination, and (52%) had high acceptance concerning COVID-19 vaccination

Table(4): Association between Attitude and Characteristics of Participants

Variables	Group	Rating			Significant
		Low	Moderate	High	
Age	20-29	5	21	10	P-value = 0.775 DF = 33 N.S
	30-39	1	1	2	
	40-49	1	5	0	
	More than or equal to 50	1	1	2	
	Total	8	28	14	
Gender	Male	1	7	7	P-value = 0.771 DF = 11 N.S
	Female	7	21	7	
	Total	8	28	14	
Marital Status	Single	3	8	3	P-value = 0.729 DF = 22 N.S
	Married	5	19	11	
	Widow	0	1	0	
	Total	8	28	14	
Level of Education	Preparatory	3	8	3	P-value = 0.173 DF = 22 N.S
	Diploma	2	11	1	
	Bachelor	3	9	10	
	Total	8	28	14	
Years of experience	Less than 10	6	22	10	P-value = 0.764 DF = 33
	10-19	1	2	2	

	20-29	0	4	0	N.S
	More than or equal to 30	1	0	2	
	Total	8	28	14	
Previously infected with COVID-19	Yes	4	15	10	P-value = 0.055 DF = 11 S
	No	4	13	4	
	Total	8	28	14	
Previously working in the COVID-19 isolation hospital	Yes	1	2	5	P-value = 0.676 DF = 11 N.S
	No	7	26	9	
	Total	8	28	14	
Dealing directly with COVID-19 patient	Yes	6	22	13	P-value = 0.538 DF = 11 N.S
	No	2	6	1	
	Total	8	28	14	
Have a family member infected or died with COVID-19	Yes	2	13	7	P-value = 0.816 DF = 11 N.S
	No	6	15	7	
	Total	8	28	14	

Results of study in this table show that there is significant association between nurse's attitude and previously infected with COVID-19 at p-value 0.05 and insignificant association with other variables.

Table(5): Association between Acceptance and Characteristics of Participants

Variables	Group	Rating			Significant
		Low	Moderate	High	
Age	20-29	1	17	18	P-value = 0.083 DF = 30 N.S
	30-39	0	1	3	
	40-49	0	3	3	
	More than or equal to 50	0	2	2	
	Total	1	23	26	
Gender	Male	0	4	11	P-value = 0.468 DF = 10 N.S
	Female	1	19	15	
	Total	1	23	26	
Marital Status	Single	0	7	7	P-value = 0.930 DF = 20 N.S
	Married	1	15	19	
	Widow	0	1	0	
	Total	1	23	26	
Level of Education	Preparatory	1	7	6	P-value = 0.300 DF = 20 N.S
	Diploma	0	8	6	
	Bachelor	0	8	14	
	Total	1	23	26	
Years of experience	Less than 10	1	18	19	P-value = 0.087 DF = 30 N.S
	10-19	0	1	4	
	20-29	0	3	1	
	More than or equal to 30	0	1	2	
	Total	1	23	26	
Previously infected with COVID-19	Yes	0	16	13	P-value = 0.455 DF = 10 N.S
	No	1	7	13	
	Total	1	23	26	
Previously working in the COVID-19 isolation hospital	Yes	0	2	6	P-value = 0.124 DF = 10 N.S
	No	1	21	20	
	Total	1	23	26	

Dealing directly with COVID-19 patient	Yes	1	19	21	P-value = 0.659 DF = 10 N.S
	No	0	4	5	
	Total	1	23	26	
Have a family member infected or died with COVID-19	Yes	0	6	16	P-value = 0.207 DF = 10 N.S
	No	1	17	10	
	Total	1	23	26	

Results of study in this table show that there is insignificant association between nurse's acceptance and socio-demographical characteristics at p-value 0.05.

Discussion:

Discussion of Socio-demographic Characteristics

Results of demo-graphic characteristics revealed that 72% of sample aged (20-29) years, this result agreed with (8) which explain that (56.4%) of participants were aged less than 30 years and disagree with (1) which explain that (125) of total (428) were aged 18-25 years.

More than half of participants were female with percentage (70%). This result agreed with(9) which explain that (81.30%) of sample were female.

Also, the results show that married participants were (70%), this finding agreed with (8) which explain that (59.9%) of participants were married.

Regarding to educational level, nurses with bachelor level of education were (44%) and (76%) of participants had years of employment less than 10 years, this finding agreed with (8) which explained that (80%) of sample had postsecondary study. Also this result supported with (9) which explained that (40%) of sample had baccalaureate degree.

. In addition, the results revealed that (58%) of participants were infected with COVID- 19 previously, this result disagree with (8) which revealed that (86.7%) were not infected with COVID-19 previously. (84%) of sample were not working in the COVID-19 isolation hospital, this finding supported with (9) which explained that (58.9%) of nurses were not working in isolation hospital. (82%) were dealing directly with COVID-19 patient, this finding disagree with (9) which explain that (58.9%) of nurses were not dealing directly with COVID-19 patient.(56%) of participants had not a family member infected or died with COVID-19, this finding disagreed with (8) which revealed that (56.8%) of participants had not a family member infected or died with COVID-19.

Discussion of Nurse's Attitudes Concerning COVID-19 Vaccination

Results of study show that (16%) of participants had low attitude concerning COVID-19 vaccination, (56%) had moderate attitude concerning COVID-19 vaccination, and (28%) had high attitude concerning COVID-19 vaccination. This results agreed with (10) a survey among general practitioners and nurses in France and French-speaking parts of Belgium and Canada conducted in October/November 2020, (72.4%) were in favor of getting vaccinated.

Discussion of Nurse's Acceptance Concerning COVID-19 Vaccination

Results of study revealed that (2%) of participants had low acceptance concerning COVID-19 vaccination, (46%) had moderate acceptance concerning COVID-19 vaccination, and (52%) had high acceptance concerning COVID-19 vaccination. This finding agreed with (11) which explained that (77.6%) of participants “probably agreed” to get vaccinated. Also, this finding disagree with (12) which revealed that (36%) of participants acceptance and (56%) hesitancy.

Discussion of Association between Attitude and Characteristics of Participants

Regarding to association between socio-demographic characteristic of participants and nurse's attitude concerning COVID-19 vaccination, results of study show that there is significant association between nurse's attitude and previously infected with COVID-19 at p-value 0.05 which mean that nurse's attitude dependent on previously infected with COVID-19, and insignificant association with other variables which mean that nurse's attitude were not dependent on study variables.

Discussion of Association between Acceptance and Characteristics of Participants

Regarding to association between socio-demographic characteristic of participants and nurse's acceptance concerning COVID-19 vaccination, results of study show that there is insignificant association between nurse's acceptance and socio-demographical characteristics at p-value 0.05 which mean that nurse's acceptance were not dependent on study variables.

Conclusions:

- 1) (16%) of participants had low attitude concerning COVID-19 vaccination, (56%) had moderate attitude concerning COVID-19 vaccination, and (28%) had high attitude concerning COVID-19 vaccination.
- 2) (2%) of participants had low acceptance concerning COVID-19 vaccination, (46%) had moderate acceptance concerning COVID-19 vaccination, and (52%) had high acceptance concerning COVID-19 vaccination.
- 3) There is significant association between nurse's attitude and previously infected with COVID-19 at p-value 0.05 and insignificant association with other variables.
- 4) There is insignificant association between nurse's acceptance and socio-demographical characteristics at p-value 0.05.

Recommendations:

- 1) Frequent lectures and seminars should be implemented to increase nurse's awareness concerning vaccination.
- 2) There is a need to replicate a similar study on large sample size.

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