

HEALTHCARE WORKERS' ATTITUDE TOWARD COVID-19 VACCINE IN DUHOK GOVERNORATE

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ABSTRACT

Background: Healthcare workers have a great role in contributing the vaccination among the population and their oriented health attitude is thought to be of major significance for protection against covid-19. The aim of this study was to determine the vaccination acceptance and refusal among healthcare workers and the possible causes, also to investigate the socio-economic-demographic factors affecting their attitude.

Methods: A cross-sectional study was conducted in Duhok governorate to assess the attitude of healthcare workers toward covid-19 vaccine, and this was held by direct interview with the participants. The questionnaire was of 2 parts, the socio-demographics and the attitude of healthcare workers toward the vaccine.

Results: A total of 562 healthcare workers participated in this survey; 94.1% of them displayed a positive attitude toward the vaccine while 5.9% revealed a negative attitude. 67.3% of the participants had received the vaccine, and 72.7% of the unvaccinated participants claimed their main cause of refusal was their concern about the safety of the vaccine. There was a statistically significant relation between healthcare workers' occupation and vaccine acceptance ($p = 0.048$), where pharmacists had the highest rate of vaccination (100%) compared to the cleaning staff (77.3%). Also participants' age group (45-60) years showed higher acceptance rate than other age groups.

Conclusions: Covid-19 vaccine acceptance among healthcare workers in the Duhok governorate was high. The findings may help the management authorities to give more information about the vaccine and contribute to improving healthcare workers' attitudes to reach the goal of 100% vaccination.

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Keywords: Covid-19, Healthcare workers, Vaccine hesitancy, Vaccine acceptance.

In late 2019 the novel coronavirus SARS-COV-2 has appeared and became a pandemic in March 2020 that yielded to 585 million positive cases and 6, 42 million deaths all over the world¹. Even though many precautionary measures have been applied on the population to decrease the burden of the disease like keeping mask on, having one meter distance,

disallow social gatherings even quarantines and lockdown, but it was not enough to control the disease²⁻³. Many countries begin to develop vaccines to induce population immunity rather than getting it from natural immunity since covid19 had resulted in dramatic rise in morbidity and mortality, and broad socioeconomic burden, mostly post mutations

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appearance⁴⁻⁵.

Vaccination is regarded as one of the strongest, safest and low-cost way used to prevent infectious diseases⁶. Covid19 pandemic has led to fast rise of many vaccines that has shown to be safe and effective against SARS-CoV-2⁷⁻⁸⁻⁹. All the population had the right to receive the vaccine, though priority is to the older group, immune-compromised hosts, who suffer from chronic diseases and healthcare workers¹⁰. There were 81 vaccine candidates according to WHO that were submitting for clinical evaluation by 12 March 2021 and 182 vaccine candidates were submitting for preclinical evaluation¹¹⁻¹². Despite vaccines approved safety and efficacy, the hesitancy is a considerable threat to the efforts taken to reach herd immunity. Vaccine hesitancy is a delay in acceptance or refusal of vaccination despite availability of vaccination services as declared by WHO¹³. Since COVID-19 vaccines have developed in a short period and the available data about the vaccines were not enough, hesitancy rate to receive the vaccine was extreme according to a review of 35 studies which showed that hesitancy rate varies from 4.3% to 72% worldwide¹⁴. Healthcare workers from the beginning of the pandemic were in the frontline, working with affected patients, which exposed them to the risk of infection. As WHO on 24 May 2021 has reported, 115000 healthcare workers have died of covid19¹⁵. However, acceptance of healthcare workers to the vaccine was not consistent, and studies have revealed ranges in the acceptance of vaccine from as high as 95% to as low as 28%¹⁶⁻¹⁷. Healthcare workers have a crucial part in

vaccination acceptance and encouragement since they help in spreading the right information about the vaccine, therefore, their attitude towards the vaccine is of value.

In Iraq, several studies have been done on the vaccine hesitancy among various groups. though, few of them has been done on the vaccine hesitancy among healthcare staff. This study inspected the attitude, acceptance and hesitancy of healthcare workers towards covid-19 vaccine in Duhok, Kurdistan, Iraq.

MATERIALS AND METHODS

Study design

A cross-sectional design has been used to evaluate the attitude of healthcare workers (I.e., doctors, pharmacists, nurses, paramedics, laboratory staff, radiology technician, administrative staff, and cleaning staff) in Duhok governorate (Akre, Bardarash, Shekhan, Amedi, Sumel, Zakho and Duhok city) from April to June 2022.

Participants who engaged in the survey were from 4 main hospitals (General Azadi Teaching hospital, Akre Gulan hospital, Amedi hospital and Zakho Maternity hospital) with 2 primary healthcare centers from each district becoming 14 centers overall, knowing that all the facilities have been chosen by simple random sampling and through systemic random sampling the healthcare workers from each facility have been chosen

Study sample

The Cochran formula has been used to estimate the sample size, n as follow:

$$n = Z^2 \times p(1 - p)/e^2$$

Where $Z = 1.96$ at 95% confidence interval (CI), $p =$ expected prevalence or proportion = 50% (in proportion of 50%, $P = 0.5$ and e is the error rate (in proportion of 50%; if 5%, $e = 0.05$).

$$n = (Z)^2 * P(1-P) / d^2$$

$$(1.96)^2 * 0.5(1-0.5) / (0.05)^2$$

$$= 354.16 \approx 385 = 500 \text{ for more accuracy}$$

The approximated sample size for this study was 385 persons according on the Cochran formula, though for more accuracy the sample size expanded.

Data collection, management and analysis:

A structured questionnaire adapted from relevant literature has been used; the questionnaire form developed in an electronic format through Kobo Toolbox website:

<https://ee.kobotoolbox.org/x/RZzQxly4>

The questionnaire to be ensured for its accuracy and reliability a pilot study has been conducted on 25 healthcare workers, and the expert reviewers has confirmed the validity.

After a short training on the use of and testing the data collection tool, the data has been collected through direct interview with the study participants asking them directly the questionnaire. The participants answered their response directly, the data submitted at a real time to the electronic database specific for the study. The data were collected from the site, imported to a Microsoft Excel Sheet, then cleaned, checked, and managed accordingly. A pivot tables were inserted from the data tables, and analysis lastly was performed.

The questionnaire was composed of two parts, the first one was about sociodemographic characteristics namely (age, gender, occupation, province and occupation), while the second part was

about their attitude about the vaccine. The second part started by asking the participant if they experienced the covid19 or not. Then, this part was divided into two sections whether their answer was yes or no regarding receiving the vaccine, for those who received the vaccine the questions were like; how much time you took to decide to get the vaccine and which type of vaccine you chose in addition which one you preferred the most, then questions about the possible causes of receiving the vaccine asked which were 10 questions. While for those participants who were not vaccinated, they have been asked about their wish to get vaccinated or not and then the possible causes of their refusal (they were 14 questions). At the end of the section the participants were asked if they encourage vaccination for adults and children.

Statistical Analysis:

Excel spreadsheet and Statistical Package for Social Studies, SPSS (IBM V 23) software is used to calculate the proportion of univariant variables, to summarize the descriptive data, and the relation of the proportion of receiving Covid-19 vaccine and getting Covid-19 with the socio-demographic characteristics tested through using Chi-square statistic and Fisher's Exact Test (when more than 20% of cells in sub-tables have expected cell counts less than 5, or the minimum expected cell count in sub-table is less than one), a p value of < 0.5 considered statistically significant.

Ethical Approval:

Ethical approval was obtained from the Research Ethics Committee of Ministry of Health (approval date 13 April. 2022). Before starting, the type of research and

questions were explained to the participants, also a verbal consent was taken from each of them. Participation was voluntary and participants could discontinue at any time.

RESULTS

A total of 562 healthcare workers participated in this survey, the mean age group was 37 years (from 18 to 60 years) with standard deviation {SD} = 8.9 of the participants, 304 were females (54.1%) and 258 males (45.9%). Among the female participants, 16 were pregnant (2.8%), and

5 were lactating (0.9%). The healthcare workers were of different educational levels, including illiterate 9 (1.9%), primary education (13, 2.3%), secondary education (119, 21.2%), diploma {institute} (205, 36.5%), bachelors' education (173, 30.8%) and higher degree education (42, 7.5%). In the study, 91 physicians participated, with 21 pharmacists, 168 nurses, 58 paramedics, 68 laboratory staff, 20 radiology technicians, 114 administrative staff, and 22 cleaning staff. As shown in Table 1.

Table 1: Socio-demographic characteristics of participants

Characteristics		Frequency	Percent
Gender	MALE	258	45.9
	FEMALE	304	54.1
If you are Female: Are you (n=304)	None	283	93.1
	Pregnant	16	5.3
	Lactating	5	1.6
Age	18 - 34 Years	249	44.3
	35 - 44 Years	192	34.2
	45 - 60 Years	121	21.5
Residency	AKRE	113	20.1
	AMEDI	62	11.0
	BARDARASH	32	5.7
	DAHUK	261	46.4
	SHEKHAN	17	3.0
	SUMEL	42	7.5
	ZAKHO	35	6.2
Education level	Bachelor's education	173	30.8
	Diploma (Institute)	205	36.5
	higher degree education	42	7.5
	Illiterate	9	1.6
	Primary education	13	2.3
	Secondary education	119	21.2
	Not mentioned	1	.2
Occupation	Administrative staff	114	20.3
	cleaning staff	22	3.9
	laboratories staff	68	12.1
	Nurse	168	29.9
	Paramedic	58	10.3
	Pharmacist	21	3.7
	Physician	91	16.2
	Radiology technician	20	3.6
Total		562	100.0

This study showed 342 (60.9%) of the participants got infected with covid-19 and

169 (30.1%) of them didn't experience it while 51 (9.1%) were not sure about it.

About 94.1% had received covid-19 vaccine while 5.95 were unvaccinated. The mean time decided to take the vaccine by healthcare workers was 109 days (from 0 to 365 days).

Regarding the relation between being diagnosed with Covid-19 and the socio-demographic characteristics, the study revealed significant relation ($p= 0.035$) with occupations where the highest

percentage of acquiring the disease was among physicians and pharmacists (73.6% and 71.4%, respectively), while the lowest percentage was found among cleaning staff (36.4%). The other socio-demographic parameters didn't manifest any significant relation with getting covid-19, as shown in table 2.

Table 2: Relation of being diagnosed with Covid-19 with the main socio-demographic characteristics and receiving Covid-19 vaccine by participants

Characteristics		Have you been diagnosed with covid19?						
		YES		Total		Chi-square or Fisher's Exact Test*	df	Sig. < 0.05
		No.	%	No.	%			
Gender	FEMALE	178	58.6%	304	54.1%	1.537	2	.464
	MALE	164	63.6%	258	45.9%			
Residency	AKRE	73	64.6%	113	20.1%	17.768	12	.123
	AMEDI	43	69.4%	62	11.0%			
	BARDARASH	26	81.3%	32	5.7%			
	DAHUK	154	59.0%	261	46.4%			
	SHEKHAN	6	35.3%	17	3.0%			
	SUMEL	21	50.0%	42	7.5%			
	ZAKHO	19	54.3%	35	6.2%			
		0	0.0%	1	.2%	5.793*	-	.431
Education level	Bachelor's education	116	67.1%	173	30.8%			
	Diploma (Institute)	118	57.6%	205	36.5%			
	higher degree education	32	76.2%	42	7.5%			
	Illiterate	4	44.4%	9	1.6%			
	Primary education	7	53.8%	13	2.3%			
	Secondary education	65	54.6%	119	21.2%			
Occupation	Administrative staff	62	54.4%	114	20.3%	24.960	14	0.035
	cleaning staff	8	36.4%	22	3.9%			
	laboratories staff	40	58.8%	68	12.1%			
	Nurse	98	58.3%	168	29.9%			
	Paramedic	39	67.2%	58	10.3%			
	Pharmacist	15	71.4%	21	3.7%			

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Characteristics		Have you been diagnosed with covid19?						
		YES		Total		Chi-square or Fisher's Exact Test*	df	Sig. < 0.05
		No.	%	No.	%			
	Physician	67	73.6%	91	16.2%			
	Radiology technician	13	65.0%	20	3.6%			
						.995	4	.911
Did you receive covid-19 vaccine?	NO	18	54.5%	33	5.9%	1.594	2	.451
	YES	324	61.2%	529	94.1%			
	Total	342	60.9%	562	100.0%			

As to relation of receiving Covid-19 vaccine of participants (n=562) with the main socio-demographic characteristics, it has been unveiled the relation between the occupation of the healthcare workers and getting vaccinated were statistically significant (p= 0.048). The pharmacists followed by nurses found to be the highest groups taking the vaccine (100% and 96.4% respectively) while cleaning staff

(77.3%) were the least ones. Concerning age groups there was a significant difference (p= 0.03) among them, the age group 45-60 years reported the highest percentage (98.3%) while the age group 18-34 years reported the lowest (91.6%). As described in table 3.

Table 3: Relation of receiving Covid-19 vaccine of participants (n=562) with the main socio-demographic characteristics, and been diagnosed with Covid-19

Characteristics		Did you receive covid-19 vaccine?						
		YES		Total		Chi-square or Fisher's Exact Test*	df	Sig. < 0.05
		No.	%	No.	%			
Gender	FEMALE	282	92.8%	304	54.1%	2.232	1	.135
	MALE	247	95.7%	258	45.9%			
Residency	AKRE	103	91.2%	113	20.1%	3.267*	-	.758
	AMEDI	59	95.2%	62	11.0%			
	BARDARASH	31	96.9%	32	5.7%			
	DAHUK	248	95.0%	261	46.4%			
	SHEKHAN	16	94.1%	17	3.0%			
	SUMEL	40	95.2%	42	7.5%			
	ZAKHO	32	91.4%	35	6.2%			
Education level		1	100.0%	1	.2%	5.793*	-	.431
	Bachelor's education	162	93.6%	173	30.8%			
	Diploma (Institute)	195	95.1%	205	36.5%			

Characteristics		Did you receive covid-19 vaccine?						
		YES		Total		Chi-square or Fisher's Exact Test*	df	Sig. < 0.05
		No.	%	No.	%			
Occupation	higher degree education	40	95.2%	42	7.5%	12.773*	-	.048
	Illiterate	7	77.8%	9	1.6%			
	Primary education	13	100.0%	13	2.3%			
	Secondary education	111	93.3%	119	21.2%			
	Administrative staff	107	93.9%	114	20.3%			
	cleaning staff	17	77.3%	22	3.9%			
	laboratories staff	61	89.7%	68	12.1%			
	Nurse	162	96.4%	168	29.9%			
	Paramedic	55	94.8%	58	10.3%			
	Pharmacist	21	100.0%	21	3.7%			
	Physician	87	95.6%	91	16.2%			
	Radiology technician	19	95.0%	20	3.6%			
Age Group	18 - 34 Years	228	91.6%	249	44.3%	7.006	2	0.03
	35 - 44 Years	182	94.8%	192	34.2%			
	45 - 60 Years	119	98.3%	121	21.5%			
Have you been diagnosed with covid19?	YES	324	94.7%	342	60.9%	1.594	2	.451
	NO	156	92.3%	169	30.1%			
	Not sure	49	96.1%	51	9.1%			
	Total	529	94.1%	562	100.0%			

Healthcare workers attitude to covid-19 vaccine

The highest proportion of participants have received Pfizer vaccine 59.4% followed by AstraZeneca vaccine 18.9% and Sino pharm vaccine 15.8%. Most of the participants preferred Pfizer vaccine (70.6%) over AstraZeneca and Sino pharm (11.6%, 11.6%). The healthcare workers have encouraged the people to take the vaccine (73.3%), though their encouragement for children vaccination was around 28.3%.

The most common cause that kept in mind for the vaccinated participants was the

protection from getting the disease or becoming seriously ill and dying from the disease (67.3%), while the least causes were presence of comorbidities (5.3) and imitating other people (9.1). as shown in table 4.

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Table 4: Frequency and percent of causes were in mind for being vaccinated

When you received the vaccine, which of the following causes were in your mind?	Frequency	Percent
It will protect you from getting the disease or becoming seriously ill or dying from the disease	378	67.3
To prevent the spread of the disease	352	62.6
Add to the number of people in the community who are protected from getting covid19(participate in producing herd immunity)	280	49.8
Presence of comorbidities (hypertension, DM, asthma, CHD, others)	30	5.3
Presence of diseased /old members in the family	131	23.3
Fear of reinfection with covid19 again	76	13.5
Receiving the vaccine to do some activities like traveling, or attending some community gatherings	81	14.4
Help us to move closer to the normal life	365	64.9
Receiving the vaccine became obligatory	140	24.9
Getting vaccinated to imitate other people	51	9.1
Total	529	100.0

The percentage of unvaccinated healthcare workers who identified their concern about the safety of vaccine as their main reason of refusal rate was (72.7%) whereas the minimum causes such as preferring to get a natural immunity rather than receiving the vaccine, not in need of the vaccine for

his/her risk level, had a serious adverse reaction from a vaccination in the past and lastly not believing covid19 is a serious disease and importance of its vaccine, was (3%). As shown in the table 5

Table 5: Frequency and percent of causes were in mind for refusing vaccination

If did not receive the vaccine (Causes)	Frequency	Percent
Concerned about the safety of the vaccine.	24	72.7
Having doubts about efficacy of the vaccine	18	54.5
Distrust in pharmaceutical companies and health organizations	13	39.4
Have a lack of information about the vaccine	12	36.4
The fear of adverse health side effects	5	15.2
Fear of adverse effect on pre-existing diseases	5	15.2
May have a long-term bad effect	9	27.3
Prefer to get a natural immunity rather than receiving the vaccine	1	3.0
Recently got infected with covid19	3	9.1
Not in need of the vaccine for his/her risk level	1	3.0
Have contraindication to the vaccine (anaphylaxis to any component of the vaccine including polyethylene glycol, anaphylaxis to previous dose of covid19)	3	9.1
Had a serious adverse reaction from a vaccination in the past	1	3.0
For the fear of needles/ injections	2	6.1
Not believing covid19 is a serious disease and importance of its vaccine	1	3.0
Total	33	100

DISCUSSION

This study aimed to determine the healthcare workers attitude to covid-19 vaccine and their causes behind it in a sample of 562 participants in Duhok hospitals and primary healthcare centers. In this cross-sectional designed study, data collection has started from April to June 2022, to determine the vaccine hesitancy between healthcare workers and the socio-demographic characteristic affecting their attitude. A percentage of 94.1% of the participants showed their acceptance to covid-19 vaccine, the participated healthcare workers were mostly female and nurses (304 and 162 respectively). In this study male healthcare workers had higher acceptance rate than females similarly to other studies¹⁸⁻¹⁹⁻²⁰⁻²¹, this might be since some females were pregnant, and some were lactating (5.3% and 1.6% respectively)

During this study 342 (60.9%) of healthcare workers showed positive medical history of covid-19 infection in which physicians were on the top of the list (73.6%) because they have close contact with patients in a way making them more vulnerable to the infection than other health staff, this was opposite to a study done in Oman country where the physicians reported a lower rate of disease (17.1%)²². The rest of the healthcare workers claimed no history of covid-19 infection (30.1%) and (9.1%) were not sure if they had experience it or not.

The reported rate of vaccine acceptance in Duhok seems to be like that seen in Singapore (95%)²³, United State (92.0%)²⁴ and Poland (91.2%)²⁵. While this rate was significantly higher than those found in Canada (76.5%)²⁶ in France (76.9%)²⁷,

Saudi Arabia (50.52%)¹⁸ and Egypt (21%)²⁸. The explanation to this difference is thought to be due to the period study has been conducted, study population and the effect the pandemic has had on the populations.

This study had started one year following vaccine production and availability meanwhile covid-19 vaccination was accessible and of unlimited amounts all over the country. Despite that, there were some healthcare workers who refused vaccination.

The current study revealed that 5.9% of the healthcare workers refused to get vaccinated and they were hesitant about it. In a study conducted in the Middle East region 60% of participants were seen hesitant to take the vaccine²⁹. In Europe the hesitancy was 13% in Italy³⁰ and 2.1% in Spain³¹.

In one study performed in Uganda many of the participants who refused vaccination were concerned about the safety of vaccine (n=242, 64.4%) which was found to be lower than percentage reported in current study (n=24, 72.7%)³².

Regarding other causes of hesitancy such as having doubts about the efficacy, distrust in the pharmaceutical companies, health organization and the lack of information about the vaccine the current study reported (54.4%, 39.4% and 36.4%) respectively. This was opposite to studies done in Africa (Freetown, Sierra Leone), Nigeria and Ethiopia in which their concern was due to worries about unforeseen future effects and a preference for natural immunity⁶⁻²¹⁻³³.

As for the socio-demographic factors affecting the attitude of healthcare workers regarding the vaccine (age, occupation,

educational level and residency), the current study has found that compelling differences among the occupation were of valid for covid-19 vaccine. As pharmacists and nurses had the highest rate of vaccine coverage and acceptance comparing to cleaning staff who had the lowest rate, that was is opposite to studies¹⁸⁻¹⁹⁻²⁰⁻²² where physicians had higher rate of acceptance than nurses, in the accessible studies physician's percentage advocating vaccination against covid-19 just before the appearance of vaccine ranged from 78% to 94.4%²⁴⁻²⁵⁻²⁷. Doctors are the most concerning and well-educated group of healthcare workers their attitude to the vaccine is of great value, in our study, the physician's percentage was 95.6%. Perceiving a high risk increases the chance of positive attitude to covid-19 vaccine³⁴. In a Greek and a Polish study, the percentage of accepting vaccination among pharmacists was 65%-65.7%³⁵, whereas in a French study, the percentage was higher 88.1%²⁴. As its clear pharmacists has a significant responsibility in spreading positive attitude toward the vaccination.

Also, it has been found that older group among the participants (45-60 years) were of less hesitant rate comparing to the younger participants who showed higher refusing attitude, in which Canadian healthcare workers were of the same results³⁶.

The study gave the participants 10 causes to answer them all as yes or no to find out their main reason of vaccination acceptance. The healthcare workers quoted as protecting themselves and not getting seriously ill or dying from the disease as their most important cause of accepting the vaccine which is the same as in

Singapore²³. Other most repeated causes were mostly to prevent the spread of the disease and getting back to normal life. Though around 24.9% of the healthcare workers accepted to get vaccinated after the vaccination became obligatory by the health authorities, by December 2021 several countries started to apply obligatory vaccination in order to induce herd immunity and they restrict the movement between countries requesting vaccination card, Italy was the first European country that makes vaccination mandatory for healthcare workers³⁷. while 14% of participants changed their mind of being hesitant and took the vaccine to participate in some activities like traveling and attending gatherings, this was mentioned in research done in Poland as well where medical student started vaccination to attend clinical classes, internship and graduation ceremonies³⁸.

At the beginning of pandemic several researches has been done among healthcare workers on the vaccination and their attitude, it has been found that with the time the acceptance rate increases and positive attitude builds as the difference can be noticed between a research done in Iraq at the beginning of the pandemic among healthcare workers and the current one, 61.7% were the acceptance rate³⁹, comparing to the present time the acceptance rate became much higher, since the knowledge and information's about the covid-19 vaccine increased and the accessibility to it became easier.

In Iraq, three types of covid-19 vaccines were available. in Duhok, healthcare workers had received Pfizer vaccine 59.4% the most and it was their preferred vaccine, while the least received vaccine was Sino

pharm (15.8%) which is considered to be the least favorite one as well.

The participants have encouraged people in their surroundings, relatives and in professional contacts on covid-19 vaccine intake at a rate (73.3%), though still the remaining percentage of the medical group is not encouraging of vaccination, this might have a bad impression of vaccination spread among the population. Considering vaccination among children, only 28.3% of the participants had encouraged vaccination.

In conclusion, only 5.9% of the healthcare workers refused vaccination (concerned about the safety of the vaccine and mistrust in health authorities) otherwise high percentage of Duhok healthcare workers have no hesitancy to the vaccine, though for more vaccine coverage and acceptance, proper vaccination plans, immunization programs and health education are advised.

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CONFLICT OF INTEREST

The authors declared that they have no conflict of interest regarding the publication of this manuscript.

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پوخته

هه‌لویستی کارمه‌ندین ساخه‌می به‌رامبه‌ر فاکسینی کوفید-19 ل پارێزگه‌ها دهوکی

باگراوند و ئارمانج: کارمه‌ندین ساخه‌می روله‌کی گرنج یی هه‌ی سه‌باره‌ت فاکسیندانێ دنێف جه‌ماوه‌ریدا و هه‌لویستی وان یی ریکخستی ب گرنج ده‌یته‌ هه‌ژمارتن بو پاراستنێ ژ نه‌خوشیا کوفید-19. ئارمانج ژ فێ لیکولینێ دیارکرنا رێژا رازیبون و نه‌رازیبونا کارمه‌ندین ساخه‌می یه‌ ده‌رباره‌ی فاکسیندانێ، هه‌روه‌سا بو پشکنینا فاکته‌ری جفاکو ئابورو دیموگرافی یین کارتیکنی دکه‌ن ل سه‌ر هه‌لویستین وان.

رێکین کاری: فه‌کولینه‌کا برگه‌یی هاتیه‌ نه‌جامدان ل پارێزگه‌ها دهوکی بو هه‌له‌سه‌نگاندنا هه‌لویستین کارمه‌ندین ساخه‌می ده‌رباره‌ی فاکسینی کوفید-19، نه‌فه‌ هاته‌ کرن ب ریکا فه‌دیتنا ئیکسه‌ر دگهل به‌شداربويا. فورمی راپرسیی ژ دوو به‌شا پێک ده‌یت، به‌شی جفاکودیموگرافی و به‌شی هه‌لویستی کارمه‌ندین ساخه‌می به‌رامبه‌ر فاکسینی.

نه‌جام: ژکوما 562 کارمه‌ندین ساخه‌می نه‌وین به‌شداربوین د راپرسییدا 94.1% ژ وان هه‌لویستی پوزه‌تیف دیارکر و 5.9% هه‌لویستی نیگه‌تیف دیارکر. 67.3% ژ به‌شداربويا فاکسین یا وه‌رگرتی دا به‌ینه‌ پاراستن ژ توشبونا نه‌خوشی و 72.7% ژ به‌شداربوین فاکسین وه‌رنه‌گرتی کره‌ ژ ئه‌گه‌را نه‌سه‌لامه‌تیا فاکسینی. په‌یوه‌ندیه‌کا به‌رجا‌ف یا (احصائی) دیار بو دناقبه‌را جوړی کارێ کارمه‌ندا و رازیبون له‌سه‌ر وه‌رگرتنا فاکسینی ($P=0.048$) وه‌ک ده‌رمانسازا بلندترین رێژا وه‌رگرتنا فاکسینی هه‌بو (100%) به‌رامبه‌ر رێژا 77.3% بو کارمه‌ندین پاڤژکرنی، هه‌روه‌سا به‌شداربوین ژ یین وان (45-60) سالی رێژکا بلندتر یا رازیبونی دیارکر ژ یین دی.

ده‌ستکه‌فتین فه‌کولینی: رێژا رازیبونا کارمه‌ندین ساخه‌می بو وه‌رگرتنا فاکسینی کوفید-19 ل پارێزگه‌ها دهوکی یا بلند بو (94.1). ئه‌فه‌ نه‌جامه‌ دبیت ده‌اریکار بن بو به‌رسین شوله‌ژی ده‌رباره‌ی وه‌شاندنا پیزانینین زیده‌تر ل سه‌ر فاکسینی و هه‌لویستان ژبو باشت کرنا هه‌لویستی کارمه‌ندین ساخه‌می ژ بو گه‌هشتن بو رێژا 100% فاکسیندان.

الخلاصة

موقف العاملين في المجال الصحي تجاه لقاح COVID-19 في محافظة دهوك

الخلفية والأهداف: يلعب العاملون في مجال الرعاية الصحية دوراً كبيراً في المساهمة في التطعيم بين السكان، ويعتبر موقفهم الصحي الموجه له أهمية كبيرة للحماية من كوفيد-19. الهدف من هذه الدراسة هو تحديد قبول التطعيم ورفضه بين العاملين في مجال الرعاية الصحية والأسباب المحتملة، وكذلك التحقق في العوامل الاجتماعية والاقتصادية والديموغرافية التي تؤثر على موقفهم.

طرق العمل: دراسة مقطعية أجريت في محافظة دهوك لتقييم موقف العاملين في مجال الرعاية الصحية تجاه لقاح كوفيد-19، وذلك من خلال مقابلة مباشرة مع المشاركين. يتكون الاستبيان من جزأين، الجزء الاجتماعي والديموغرافي وجزء موقف العاملين في مجال الرعاية الصحية تجاه اللقاح.

النتائج: شارك في الاستبيان 562 من العاملين في مجال الرعاية الصحية، 94.1% منهم أظهروا موقفاً إيجابياً تجاه اللقاح، بينما أظهر 5.9% موقفاً سلبياً. تلقى 67.3% من المشاركين اللقاح لغرض حمايتهم من الإصابة بالمرض، وادعى 72.7% من المشاركين غير المطعمين أن السبب الرئيسي لرفضهم هو قلقهم بشأن سلامة اللقاح. كانت هناك علاقة ذات دلالة إحصائية بين مهنة العاملين في مجال الرعاية الصحية وقبول اللقاح ($p = 0.048$) حيث كان لدى الصيادلة أعلى معدل تطعيم 100% مقارنة بطاقم التنظيف 77.3%، كما أظهرت الفئة العمرية للمشاركين (45-60) معدل قبول أعلى من فئة عمرية أخرى.

الاستنتاجات: كان قبول لقاح Covid-19 بين العاملين في مجال الرعاية الصحية في محافظة دهوك مرتفعاً، حوالي 94.1%. وقد تساعد هذه النتائج السلطات الإدارية على إعطاء مزيد من المعرفة حول اللقاح والمواقف في تحسين موقف العاملين في مجال الرعاية الصحية للوصول إلى هدف التطعيم بنسبة 100%.