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Assessment of Nurses' Attitudes Regarding COVID-19 in Al-Hilla Teaching Hospitals

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ABSTRACT

Aims Coronavirus Disease-2019, is a rapidly spreading pandemic triggered by a new human coronavirus. It was the most common dangerous health crisis. The study aimed to assess attitudes regarding COVID-19 among nurses.

Instrument & Methods A descriptive study was carried out to assess nurses' attitudes regarding COVID-19 in Al-Hilla teaching hospitals at Al-Hilla city from 25th September 2020 to 20 February 2022. A convenient non-probability sample was selected for 200 nurses who are working at epidemic hospitals. A questionnaire was comprised of two parts; demographical data, and the items related to nurses' attitudes about COVID-19. The data were analyzed by one-way ANOVA using SPSS 25, and Microsoft Excel 2010. were performed in assessing any difference in mean knowledge score by demographic characteristics.

Findings The findings showed through the analysis of attitudes towards COVID-19 demonstrated that the majority of nurses (86%) expressed a positive attitude towards COVID-19, which illustrated the nurses had psychological attention to overcoming the covid-19 pandemic, there were important variances in the attitudes regarding COVID- ($p<0.05$) in related to nurses' ages, there were significant differences between nurses' about COVID-19 ($p<0.05$), concerning nurses' educational levels and displays that there were significant differences between nurses' attitudes regarding COVID-19 ($p<0.05$) with the working years in nursing.

Conclusion Nurses expressed positive attitudes towards COVID-19. Nurses' attitudes toward COVID-19 had significant differences regarding the variables such as Nurses' age, education level, and years of experience in nursing.

Keywords Nurses; Attitudes; COVID-19

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Introduction

Coronaviruses are a cluster of zoonotic viruses which cause a wide variety of illnesses, from serious respiratory illnesses to the common cold. By zoonotic mechanisms, these viruses can be transferred from animals to humans. Several coronaviruses have been identified in animal populations that have not yet infected humans. COVID-19 is the most recent leap to humans [1].

The first two categories mostly affect birds, whereas the third and fourth types primarily affect mammals. Human CoVs have been classified into six categories. These include the Betacoronaviruses HCoVHKU1, HCV-OC43, Middle East Respiratory Syndrome coronavirus (MERS- CoV), and Severe Acute Respiratory Syndrome coronavirus (SARS-CoV), HCoV229E, and HCV-NL63, as well as the Alphacoronaviruses HCoV229E and HCV-NL63. Coronaviruses were not widely recognized until the SARS pandemic in 2003 [2].

MERS 2012 and, more recently, the COVID-19 outbreaks came before it. SARS-CoV and MERS-CoV are highly dangerous viruses that move from bats to palm civets and dromedary camels, and then to humans [3].

After infecting humans in Wuhan City's Huanan street market, SARS-CoV-2 was likely transmitted by bats, according to phylogenetic research [4].

The first human infection happened in Wuhan, Hubei, China. The initial time of symptom beginning was documented as 1 December 2019 in a research of the primary 41 confirmed patients with COVID-19, available in The Lancet in January 2020. Official WHO publications as of December 8, 2019, verified the earliest onset of symptoms [5, 6].

According to the Iraqi Ministry of Health, COVID-19 was first found in an Iranian resident undergraduate in Najaf City on February 24, 2020 [7].

Then, additional cases were recorded among Iraqis, especially among those who had been backed from Iran, and the number of confirmed cases transferred locally began to climb day by day in other Iraqi cities, including Baghdad, due to high laboratory testing capability [8].

As a result, the Iraqi Government and Ministry of Health, in collaboration with the Committee for Health and National Safety and the Kurdistan Regional Government, have taken several measures to try to limit the spread of the outbreak, including closing schools, universities, general shopping centers, movie theatres, and prohibiting public gatherings, including all major religious gatherings, as well as banning travel from infected areas [9].

Nurses are on the front lines of COVID-19 pandemic protection, and because of their intimate interaction with and care for patients, they will be exposed to infected persons regularly [10].

The WHO encourages healthcare workers and patients' close relatives to be protected to prevent the disease from spreading. Hand cleaning, social distancing, and post-exposure prophylaxis (covering mouth and nose when coughing and sneezing) are all primary preventative practices [11]. In reality, there is a lack of data on nurses' perceptions, attitudes, and understanding of the COVID- 19 epidemic. As a result, it's critical to determine what nurses know about the virus, as well as what they know about pandemic consequences and illness prevention. According to another research, nurses' perspectives differ as the patient progresses through the condition. Nurses may also have differing perspectives on COVID-19, resulting in a variety of clinical care practices and results. Nurses must get a strong understanding of the illness process to play a larger role in disease management. To accelerate beneficial results, nurses must understand and respond to COVID-19. Another aspect that influences an individual's awareness of the illness is their attitude toward it [12, 13]. The study aimed to assess the attitudes regarding COVID-19 among nurses and found the differences in nurses' attitudes and their selected demographic variables.

Instrument and Methods

A descriptive study was carried out to assess nurses' attitudes regarding COVID-19 in Al-Hilla Teaching Hospitals at Al-Hilla city from 25th September 2020 to 20 February 2022. A convenient (non-probability sample) was selected Based on the formula of Steven K. Thompson for calculating the sample size from the population [14], the general population of About 450 nurses from both hospitals, put into consideration the Marjan medical city hospital as epidemic hospital and whole nurses took in the study and Al-Hilla teaching hospital have one unit as an epidemic unit, based on the previous formula the accessible population calculated about 200 nurses. who were working at epidemic hospitals, The reliability of the instrument was r=0.711 for the domain of nurses' attitudes regarding COVID-19.

In the study a questionnaire was constructed depending on multiple studies [15, 16], which comprised mainly two parts, the first one is demographical data containing age, educational level, and years of employment in nursing, and the second part contains items related to nurses' attitudes about COVID-19 which contain 10 items as Likert scale with three scales; agree, neutral, disagree. The items found in part two were scored using a Likert scale with three scales: agree=3, neutral=2, and disagree=1 for each item, and was estimated by calculating the cutoff of points for the mean score and managed to score as shown: Negative=10-16, Neutral=17-23, Positive=24-30. The study questionnaire was answered by the respondents (nurses) that are working in epidemic hospitals at the time of conducting the study and collecting data (Marjan medical city hospital and Al-Hilla teaching hospital). after taking formal approval from health directors and previous hospitals and a

permission agreement of participation was obtained. The questionnaires were collected from the respondents after they were delivered to each nurse's staff. The average time that was taken for the nurse participants to fill out the questionnaire was between 10-20 minutes. Although the questionnaire was validated from the studies that were dependent on the construction of the questionnaire the researcher sent the questionnaire to 15 experts to validate it and the pilot study was carried out at Marjan medical city hospital and Al-Hilla teaching hospital, the researcher was selected 20 nurses; 15 from the Marjan medical city hospital and 5 nurses from Al-Hilla teaching hospital, the instrument filled out by them and after that reliability was achieved.

To ensure compliance with research ethics, the identity of the nurses was not revealed and the data are analyzed collectively.

The data were analyzed through the utilization of SPSS version 25, and Microsoft Excel 2010. We worked on the statistical data examination techniques to assess our research's findings. Numerical variables were measured as mean and standard deviations while categorical variables were expressed as frequencies and percentages. One-way ANOVA analyses were performed in assessing any difference in mean knowledge score by demographic characteristics.

Findings

The mean age was 30.55+6.424. Participants' age groups were shown in Figure1.

The results in Figure 2 indicate regarding the educational qualification, most had a diploma degree (n=81), followed by those who are nursing school graduates (n=56), followed by those who had a bachelor in nursing degree (n=55), and those who are the primary school of nursing (n=8).

The results in Figure 3 indicate years of experience-related results, most of them have 5-10 years of experience (n=92) followed by the group who had <5 years of experience (n=64) and followed by those who had more than 10 years (n=44).

The results in Figure 4 through the analysis of attitudes towards COVID-19 demonstrated that nurses showed a mean±SD=26.47±3.988; the nurses expressed positive attitudes towards COVID- 19 (n=172).

The results in Table 1 display that there were significant variances in the nurses' attitudes regarding COVID-19 at $p<0.05$ related to nurses' ages at $p>0.05$ related to nurses' ages. On other hand the finding demonstrated; that there were important variances in nurses' attitudes regarding COVID-19 at a $p<0.05$ related to nurses' education level. The results also display that there were important variances in nurses' attitudes regarding COVID-19 at $p<0.05$ concerning nurses' experiencing years at $p>0.05$.

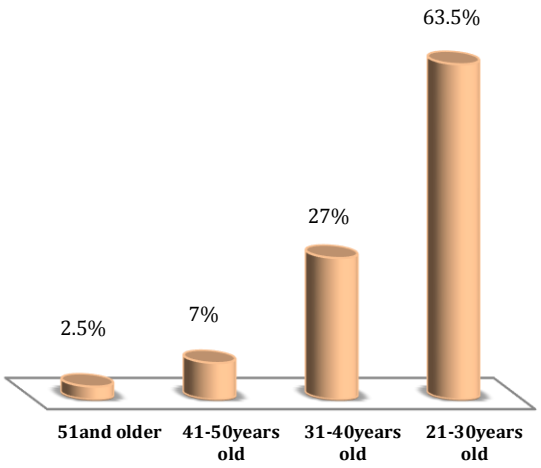

Figure 1) Distribution of study sample by their age

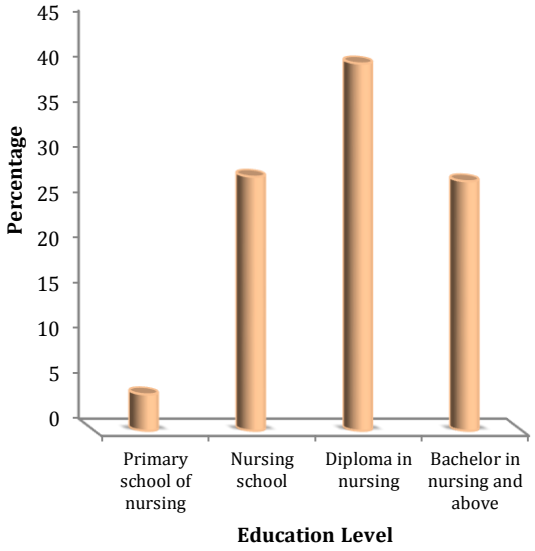

Figure 2) Distribution of study sample by their education

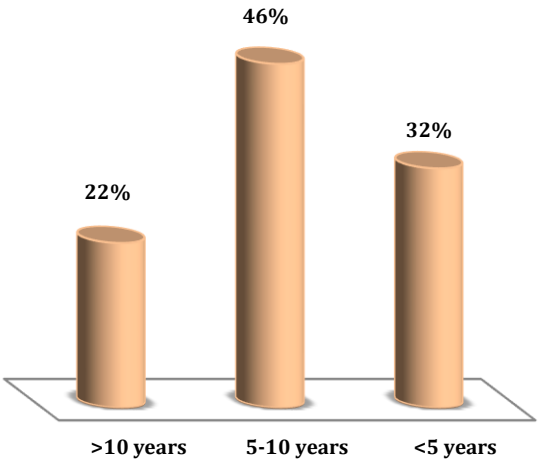

Figure 3) Distribution of study sample by their years of experience

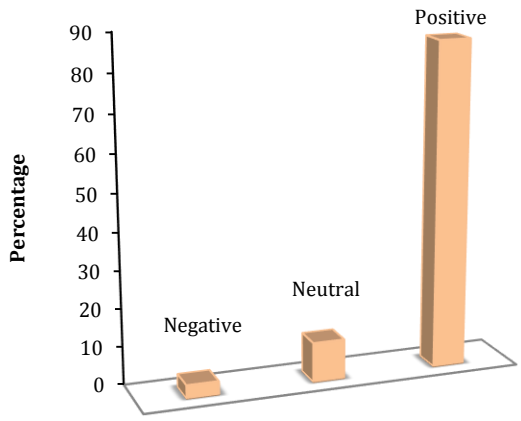

Figure 4) Overall nurse's attitudes toward COVID-19

Table 1) Significant differences in nurses' attitudes with their age, educational level, and years of experience (n=200)

Alteration Source	Summation of Squares	d.f	Squaring Mean	F	p.
Age					
Between Groups	1.521	3	0.507	3.297	0.022
Within Groups	30.138	196	0.154		
Total	31.659	199			
Years of Experience					
Between Groups	1.320	2	0.660	4.287	0.015
Within Groups	30.338	197	0.154		
Total	31.659	199			
Education Level					
Between Groups	1.889	3	0.630	4.146	0.007
Within Groups	29.770	196	0.152		
Total	31.659	199			

Discussion

The findings pointed out that the majority of the nurses (63.5%) in the early adult ages within the age group 21-30 years old, this finding illustrated the policy of the higher health authorities to employ new graduates to fill the shortage of nursing staff.

These findings were agreed with Hossain *et al.,* who conducted a study in five different districts of Bangladesh. In their study, they found that most HCWs were aged between 21 and 30 years (76.8%) old [17].

In the same regard, these findings were supported by the study carried out by Zhan *et al.* [18] which revealed in the additional analysis of the study result that more than half of the study participants (50%) were less than 30 years old. Concerning educational qualification, the finding of the study declared that most of the nurses 40.5% had a diploma degree, because the major proportion of nursing staff in the health institutions was with a diploma degree, because of the large numbers of technical institutes and higher health institutes that graduate diploma degrees rather than other specialties. These findings were supported by the study conducted by Sahar *et al.,* who conducted a study on public health nurses (PHN) in Indonesia, which declared that about 61.4% of the study sample held a diploma in nursing [19].

Moreover, regarding the years of experience, the findings depicted that most nurses 46.0% had between 5-10 years of practice in the field of nursing, which illustrated the employment of newly graduated nursing staff because the new trend of previous governments to employ nurse with different specialties to provide all the health institutions with nursing staff and help in reduced shortage in nursing. These findings were agreed with Saqlain *et al.,* who conducted a cross-sectional study in Pakistan The study declared that about 54.7% of nurses who participated in the study had more than five years of experience in the nursing field [16].

The findings showed the analysis of attitudes toward COVID-19 demonstrated that the majority of nurses (86%) expressed a positive attitude towards COVID-19, which illustrated the nurses had psychological attention to overcoming the covid-19 pandemic.

These findings agreed with Limbu *et al.,* which was conducted in Bhairahawa, Nepal. In this study, they showed that overall seen positively had COVID-19 53.4% of healthcare professionals [20].

Moreover, another study conducted by Nepal *et al.,* The study conducted in numerous health foundations sited in the Chitwan area of Nepal, illustrated that the majority of respondents approximately (90.93%) had a positive attitude regarding COVID-19 [21].

Findings display; that there were important variances in the attitudes regarding COVID-19 at a $p<0.05$ about nurses' ages. This means a different nurse's age may lead to a change in nurses regarding COVID-19.

These findings were supported by Nemati *et al.,* who conducted this study in Shiraz z, Iran, and pointed out that the total knowledge score was not affected by age of nurses [22].

The findings demonstrated that there were significant differences between nurses about COVID-19 at $p<0.05$, and nurses' educational levels.

These findings agreed with Shawahna; The study was conducted in the Occupied Palestinian Territory, and the study findings showed that nurses who had high academic achievements expressed a highly positive attitude compared to nurses who did not have high academic achievements [23].

Moreover, these findings are supported by Almohammed *et al.,* who conducted their study in Riyadh, Saudi Arabia. This study illustrated that the participants who had higher education levels were respondents with lesser educational levels who had less knowledge and a more optimistic attitude [24].

The findings display that there were significant differences between nurses' attitudes regarding COVID-19 at $p<0.05$with the working years in nursing.

These findings illustrate there was a relation between the experience' years in the field of nursing and the nurses' regarding COVID-19, which can

show when the differences occur in the mean of years of experience in nursing.

These findings were supported by Al-Dossary *et al.* Who conducted this study in Saudi Arabia across five regions, this study stated that related to the groups of experience, there was a statistically significant difference between participants in the domain of the attitudes and nurses' experiences [25].

Conclusion

Nurses expressed positive attitudes towards COVID-19. Nurses' attitudes toward COVID-19 had significant differences regarding the variables such as Nurses' age, education level, and years of experience in nursing.

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Conflicts of Interests: The authors declared no conflict of interest.

Authors' Contributions: AL-Salih SSH (First Author), Introduction Writer/Methodologist/Main Researcher/Statistical Analyst/Discussion Writer (85%); Jaber Muhbes F (Second Author), Introduction Writer/Methodologist/Assistant Researcher (15%)

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