

Knowledge of Nurses Participating in Courses Related to Coronavirus Disease Regarding Nature and Complications of Coronavirus in Baghdad Teaching Hospital.

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Abstract

Background: The coronavirus disease of 2019 has fast spread over the world, posing a serious threat to human health. This epidemic is extremely stressful for healthcare workers in general, and nurses in particular, because they are at the vanguard of the worldwide struggle against COVID-19.

Aims: Assessment of the Nurses' (Participating in Courses Related to Coronavirus Disease) knowledge Regarding Nature and Complications of Coronavirus

Methodology: A cross-sectional study design is carried out to assess the Nurses' (Participating in Courses Related to Coronavirus Disease) Knowledge Regarding Nature and Complications of Coronavirus. A non – probability (purposive) sample of (55) nurses (males and females), who were working in Baghdad Teaching Hospital from different units.

Results: Result showed that the Nurses Participating in Courses Related to Coronavirus Disease have good level of knowledge about Nature and Complications of Coronavirus were (16 of 20 items) showed good level of knowledge.

Conclusion : Nurses Participating in Courses Related to Coronavirus Disease have a good level of knowledge Regarding Nature and Complications of Coronavirus.

Key-wards: Knowledge, Nurses , Courses , Coronavirus Disease, Baghdad Teaching Hospital

Introduction

According to the World Health Organization (WHO), infectious diseases are the third leading cause of death globally. The situation of emerging epidemics around the world poses a great danger to individuals and societies. The current and most important pandemic in recent times is the COVID-19 pandemic (Taghaddom et al., 2020).

The first patient with COVID-19 was reported in Iraq on February 24, 2020, and he was an Iraqi visitor from Iran. COVID-19 infections had reached 4469 confirmed cases as of May 24, 2020, with 160 deaths and 2738 individuals cured of the disease. Authorities have used important public health tactics to confront and control the outbreak across the country. The number of instances continues to rise rapidly (Sarhan, et al., 2020).

COVID-19 is spread by human-to-human transmission through the droplet, feco-oral, and direct contact and has an incubation period of 2–14 days (Lai, et al., 2020). During this period, also known as the “pre-symptomatic” period, some infected persons can be contagious and therefore transmit the virus to others (Yu, et al., 2020; Kimball, et al., 2020).

Nursing is an essential component of medical care, and nurses’ knowledge and practice about disease directly affect patient outcomes. Similarly, during an outbreak, nurses’ knowledge and practice play positive roles in improving the recovery rate, reducing the length of the hospital stay and mortality, and preventing in-hospital infection and occupational exposure. To date, most studies focus on the knowledge and practice of the general public, and few have investigated the knowledge and practice of nurses (Bhagavathula, et al., 2020; Zhou, et al., 2020).

Health care workers (HCWs) are the primary healthcare providers in contact with patients and are an important source of exposure to infected cases in healthcare settings; thus, HCWs are expected to be at high risk of infection, However, along with HCWs, student nurses pursuing General nursing and Midwifery (GNM), B.Sc. (N), and M.Sc. (N) are also posted in various health-care facilities and in a community setting as an additional workforce to combat the COVID-19; hence, they are also expected to be at high risk to get

infected with the virus without adequate knowledge and poor perception about COVID-19 (Zhong et al., 2020).

Methodology:

Design of Study:

A cross-sectional study design is carried out to assess the Nurses'(Participating in Courses Related to Coronavirus Disease)Knowledge Regarding Nature and Complications of Coronavirus

Sample of the study

A non –probability (purposive) sample of (55) nurses (males and females), who were working in Baghdad Teaching Hospital from different units.

Setting of the Study

The study is conducted at Baghdad Teaching Hospital (Emergency unit, Hemodialysis unit, Intensive care unit, Medical units, surgical units, Cardiac care unit and Respiratory unit).

Study Instrument :

To reach the objectives of the study the researcher constructs the study instrument which consists of (2) parts which are:

Part I: Demographic characteristics of the study sample.

Part II: Nurses' knowledge about nature and complications of COVID-19, which consist of two domains:

First Domain: Nurses' knowledge related to the nature and physiology of the disease (Coronavirus-19) consists of (15) items, using a (0, 1) score.

Second Domain: the knowledge of nurses related to the complications of COVID-19. Consist of (5) items, using a (0, 1) score.

Data collection

The nurses' knowledge about the nature and complications of Coronavirus was assessed by the questionnaire containing 20 questions about knowledge, where the self-administrating technique uses which the nurse fills the questionnaire form by themselves,

Statistical Analysis

The questionnaires were analyzed using SPSS version 24 and Microsoft Excel (2010). Descriptive data analysis by Tables (Frequencies, and Percentages), and summary statistics tables including Observed Frequencies, Percent, Mean of score (MS), as well as scoring scales of two categories (Correct, and Incorrect), of MCQ scoring scales, which were represented with integer numbers (1, and 0), respectively.

Result

Table (1): Distribution of the studied groups according to socio-demographic characteristics.

Variable	Classes	No	%
Gender	Male	18	32,73
	Female	37	67.27
Age Groups	20 - less than 30	30	54.5
	30 -less than 40	15	27.3
	40 – 49	10	18.2
Educational level	Nursing high school graduate	19	34.5
	Nursing Diploma graduate	22	40.0
	Nursing graduate	14	25.5
Current workplace	Emergency unit	12	21.9
	Intensive care units	6	10.9
	Surgical units	6	10.9

	Medical units	7	12.7
	Hemodialysis unit	10	18.2
	Respiratory units	8	14.5
	Cardiac care unit(CCU)	6	10.9
Years of service in the nursing field	1-5 Years	22	40
	6-10Years	10	18.2
	11-15 Years	9	16.4
	16-20 Years	7	12.7
	More than 20 years	7	12.7
Do you educate yourself with specialized knowledge in your field of work in a self-reliant manner?	No	4	7.3
	Yes	51	92.7
If the answer is yes, identify the resources for self-learning	Books, newspapers and journal	10	18.2
	Internet and social networking sites	36	65.4
	Solid scientific sites	9	16.4

%; PERCENTAGE, N: Number

Result of table(1) showed that .Highest percentage of participants (67.2%) were female ,(54.4%) of them were within age groups(20 to less than 30 years).

Regarding educational level , table showed that (40%) of them were with nursing diploma graduate, and (21.9%) of them answer that the current work place were emergency unit .

Regarding years of service in the nursing field , highest percentage(40%) of participants were have (1-5 years).Regarding the question , Do you educate yourself with specialized knowledge in your field of work in a self-reliant manner? Highest percentage of them (92.7%) of them answer Yes, and (65.4) answer that they resource of self-learning were Internet and social networking sites.

Table (2): Assessment of Nurse's(Participating in Courses Related to Coronavirus Disease) Knowledge about COVID-19 nature and physiology of the disease (Corona virus)

Item	Mean	SD	Assess
1. Corona viruses are enveloped positive...	0.9	0.31	Good
2. The most important antibodies in COVID-19 are...	0.97	0.18	Good
3. Antibodies are formed in a person's body.. days after the person's infection.	0.93	0.25	Good
4. Symptoms of Covid-19 disease can include increased heart rate and the reason is due to ...	0.8	0.39	Good
5. How long the corona virus stays alive in the air is ...	0.78	0.4	Good
6. The age group most affected by COVID-19 are ...	0.69	0.45	Good
7. Quarantine is known as a stone ...	0.9	0.31	Good
8. Ways to prevent COVID-19 are ...	0.81	0.385	Good

9. The period of isolation for patients (Covid-19) is ...	0.93	0.25	Good
10. The incubation period for COVID-19 is ...	0.72	0.425	Good
11. When does the COVID-19 infection period begin?	0.88	0.26	Good
12. COVID-19 is caused by a virus called	0.73	0.42	Good
13. The diagnostic test that determines the presence of the virus (Covid-19) in the body is ...	0.59	0.5	Moderate
14. There are sub-families of corona viruses, which are ...	0.83	0.37	Good
15. SARS-CoV-2 belongs to the strain	0.87	0.255	Good

No: Number, SD: Standard Deviation for total score, Assess: Assessment, Poor= 0-0.33, Moderate= 0.34-0.67, Good= 0.68

Result of table(2) showed that , the level of nurse'(Participating in Courses Related to Coronavirus Disease) Knowledge about COVID-19 related to the nature and physiology of the disease (Corona virus) were good in all items , except (13) item which showed low moderate level .

Table (3): Assessment of Nurse's (Participating in Courses Related to Coronavirus Disease) Knowledge about COVID-19 related to complication of the disease (Corona virus)

Item	Mean	SD	Assess
1. Acute respiratory distress syndrome (ARDS) is an important complication of COVID-19 patients	0.8	0.39	Good
2. COVID-19 can lead to pneumonia, respiratory failure and death	0.78	0.4	Good
3. Complications and physical damages disappear for patients recovering from the Corona virus who were admitted to the hospital, after 3 weeks of leaving the hospital.	0.59	0.5	Moderate
4. The liver is one of the most affected organs due to infection with the Corona virus	0.32	0.97	Low
5. There is no effect of the Corona virus on the cognitive and mental capabilities of the patient who is recovering from the virus	0.5	0.59	Moderate

No: Number, SD: Standard Deviation for total score, Assess: Assessment, Poor= 0-0.33, Moderate= 0.34-0.67, Good= 0.68

Result of table(3) showed that , the level of nurses'(Participating in Courses Related to Coronavirus Disease) Knowledge about COVID-19 related to complication of the disease (Corona virus) Good in items (1,2), Moderate in items(3,5) and Low in item (4).

Discussion

Part I :Discussion of Socio-Demographic Characteristics of study samples.

highest percentage of participants (67.17%) were female and only (32.72%) were male. This result agree with study done by Saadeh et al (2021) , which showed that highest percentage (79.4%) of participants were female .

Regarding age groups : result showed that highest percentage of participants (54%) were within age group (20- less than 30 years).This result agree with study done by Kim et al (2021), which showed that the high percentage of nurses ranged (48%) in age from (20-29) years.

Regarding Educational level: result showed that highest percentage of participants (40%) were with Nursing Diploma graduate. This result agree with study done by Kafle et al (2020) , which showed that high percentage (43.5%) of nurses were diploma.

Current workplace :result showed that highest percentage of participants (40%) were working in emergency unit. This result agree with Study done by Danielle et al (2020) which show that the high percentage of nurses (21.5%) were working at emergency department .

Years of service in the nursing field :result showed that highest percentage of participants (40%) were have from (1-5) Years of service in the nursing field. Study by saqlain et al (2020) that found the high percentage of nurses have (>5 years) of service in the nursing field .

Part II: Discussion of Nurse' (Participating in Courses Related to Coronavirus Disease) Knowledge about COVID-19

Result of table (2) and (3) showed that the level of Nurses'(Participating in Courses Related to Coronavirus Disease) Knowledge about COVID-19 were (good) in 16 items , moderate in 3 items , and only (1) items show low level, which indicate that the nurses' have good Knowledge about COVID-19.

This result agree with study done by Nemati et al(2020), which showed that More than half of the nurses (56.5%) had good knowledge about COVID-19.

Conclusion

-Nurses Participating in Courses Related to Coronavirus Disease Regarding Nature and Complications of Coronavirus have a good level of knowledge about the nature and physiology of the disease (Corona virus).

-Nurses Participating in Courses Related to Coronavirus Disease Regarding Nature and Complications of Coronavirus have a good level of Knowledge about COVID-19 related to Complication of the disease (Coronavirus)

Recommendation:

- Recommendation of the Ministry of Health to increase the number of training courses regarding COVID-19 across Iraq to keep and enhance the good knowledge about COVID-19.

- The recommendation of the nurses working in the hospital to educate patients and their relative about the Corona pandemic because they have good knowledge about it.

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