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Assessment of Knowledge of Corona Virus Survivors toward Prevention Methods during Quarantine Period in the Provinces of the Middle Euphrates, Iraq: Online Cross-Sectional Study

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ABSTRACT

Background A novel coronavirus infection is an emerging infectious disease that was identified in December 2019 in Wuhan- city, China. The infection has in Iraq; several unprecedented measures have adapted to control the coronavirus transmission. These measures include the suspension of public transport; the closure of educational institutions; the prevention of public gatherings and events such as daily and Friday prayers, Church gathering, weddings, and funerals; the isolation of infected people; and the quarantine of suspected cases. Community health prevention program cannot be successful without health education programs which increase the commitment to control measures. To assist the management plan of coronavirus outbreak in Kurdistan region, urgent measures were needed to assess the public's knowledge about the infection at this difficult time. Therefore, the aims of this study were to assess the level of knowledge of corona virus survivors toward coronavirus outbreak .

Objectives: The study aims at assess knowledge of Corona virus survivors toward concepts of domains of quarantine (Social distancing, sterilization, healthy food, and healthy behavior).

Methodology: A descriptive-cross-sectional online study design is conducted throughout the period of October 1st 2020 to February 17th 2021, assessment of knowledge of corona virus survivors in the central Euphrates in concepts of domains of quarantine (Social distancing, sterilization, healthy food, and healthy behavior). The snowball sampling methods (a non-probability) of (475) coronavirus survivors in governorates of the middle Euphrates, Iraq. The

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data were collected through the utilization of the developed questionnaire after the validity and reliability are estimated, and by means of online study design. Reliability of the questionnaire is determined through a pilot study and the validity through (13) experts. The data analyzed through the use of the descriptive and inferential statistical analysis procedures.

Results: he majority Corona virus survivors were moderate knowledge with overall assessment of Corona virus survivors toward concepts of domains of quarantine (Social distancing, sterilization, healthy food, and healthy behavior).

Conclusions: The majority of study sample infected persons who lose their sense of smell and taste have a mild infected and most of the infected persons and smokers have a mild infection**.**

Recommendations: Take vitamin D and zinc to support the body's immune system and consolidation the breathing system through physical rehabilitation and hitting the patient's back in a prostrate position, as well as hot bath and breathing exercises and maintaining the cleanliness and sterilization of things and surfaces.

Key words: Assessment, Corona virus survivors, quarantine period.

INTRODCTION

The World Health Organization (WHO) confirmed the novel coronavirus infection coronavirus as a pandemic on March 11, 2020. People's awareness, behaviors, and habits about the infection are potentially affected by their adherence to infection control measures. The aim of this project was to evaluate the awareness of corona virus survivors during the quarantine period in Iraq's central Euphrates provinces [(1)]. On December 12, 2019, an outbreak of an unexplained acute respiratory tract infection started at the Huanan south china seafood market in Wuhan, Hubei Province, China [(2)]. Coronavirus disease (COVID-19) is a newly discovered coronavirus that causes an infectious disease. The majority of people infected with the coronavirus will have mild to moderate breathing problems and will recover without needing any special care [(3)]. People with chronic diseases such as high blood pressure, diabetes, or heart problems, as well as the elderly, infants, pregnant women, smokers, immune compromised people, and those with chronic diseases such as high blood pressure, diabetes, or heart problems, are all at high risk of contracting coronavirus. Currently, the effects of the vaccinations that have been manufactured are uncertain, and therapies are limited to the symptoms that the affected person encounters [(4)]. Knowing what there is to know about the coronavirus, the disease it causes, and how it spreads is the best way to avoid and slow down

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transmission. Clean your hands regularly or use an alcohol-based rub to protect yourself and others from infection, and avoid touching your skin [(5)]. The current coronavirus pandemic is transmitted by tiny droplets from the nose or mouth that spread when a person infected with the virus coughs or exhales [(6)]. It can also be spread through the air. Fever, dry cough, tiredness, lung infection, and trouble breathing are the most frequently recorded symptoms. A headache, runny nose, diarrhea, sore throat, or nasal congestion may occur in some patients [(7)].

OBJECTIVES

The study aims at assess knowledge of Corona virus survivors toward concepts of domains of quarantine (Social distancing, sterilization, healthy food, and healthy behavior).

METHODOLOGY

A descriptive-cross-sectional online study design is conducted throughout the period of October 1st 2020 to February 17th 2021, assessment of knowledge of corona virus survivors in the central Euphrates in concepts of domains of quarantine (Social distancing, sterilization, healthy food, and healthy behavior).

The snowball sampling methods (a non-probability) of (475) coronavirus survivors in governorates of the middle Euphrates, Iraq. The data were collected through the utilization of the developed questionnaire after the validity and reliability are estimated, and by means of online study design. Reliability of the questionnaire is determined through a pilot study and the validity through (13) experts. The data analyzed through the use of the descriptive and inferential statistical analysis procedures.

RESULTS

Table 1: Distribution of the Study Sample by their Demographic Data

Demographic Data	Frequency N=475	Percentage
Residency		
Urban	441	92.8
Rural	34	7.2
Total	475	100%
Gender		
Male	440	92.6

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Female	**35**	**7.4**
Total	**475**	**100%**
Age Group		
Less than 20-30	**156**	**32.9**
31-41	**202**	**42.5**
42-52	**95**	**20**
53-63	**22**	**4.6**
Total	**475**	**100%**
Marital status		
Married	**293**	**61.8**
Absolute / absolute	**159**	**33.5**
Widowed / er	**2**	**0.4**
separate / separate	**21**	**4. 6**
Total	**475**	**100%**
Academic Achievement		
Faculty and above	**330**	**69.5**
Institute	**130**	**27.4**
Secondary school	**10**	**2.1**
Intermediate school	**3**	**0.6**
Primary school	**2**	**0.4**
Total	**475**	**100 %**
Monthly income		
Sufficient income	**320**	**67.4**
Insufficient income	**155**	**32.6**
Total	**475**	**100%**

This table shows that the (92.8%) from the study subjects are from urban residential area. In regarding to the subjects' gender, the (92.6%) from the study subjects are male. While in regarding to the age group, the study results show that the (42.5%) from the study subjects are within the third age group (31-41) years old. Furthermore, the study results indicate that majority of the study subjects (61.8%) are married. In concerning with the subject's academic achievement in the study those who were faculty and above in the study sample accounted (69.5%), and (67.4%) for sufficient income.

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Table 2: Distribution of the Study Subjects by their Responses to the General Information

General Information										
NO.	Items	Agree		Natural		Disagree		M.S	R.S	Grade
		F	%	F	%	F	%			
1	Coronavirus is an infectious disease.	320	67.4	5	1.1	150	31.5	2.3	76.6	**Moderate**
2	Coronavirus is transmitted directly through	465	97.9	0	0	10	2.1	2.9	96.6	**High**
3	A high body temperature is one of the signs of infection with the Coronavirus	365	76.8	90	18.9	20	4.2	2.7	90	**High**
4	The source of your infection	335	70.5	135	28.4	5	1.1	2.69	89.6	**High**
5	Some infections are minor and others are severe, and the reason for this is human immunity	330	69.4	140	29.5	5	1.1	2.68	89.3	**High**
6	The person who took care of you during the home quarantine period	365	76.8	105	22.1	5	1.1	2.76	92	**High**
7	Gargle with hot warm water, inhaling the steam and using a hair dryer to work on	459	96.7	11	2.2	5	1.1	2.96	98.6	**High**
8	Wearing a mask prevents infection with Coronavirus	294	61.9	30	6.3	151	31.8	2.30	76.6	**Moderate**
9	You were diagnosed with	89	18.7	10	2.1	376	79.2	1.39	46.3	**low**
10	Attention to personal hygiene, including not sharing the dishes used by the patient and disinfecting surfaces that are frequently touched, such as electrical points and door handles	194	40.8	5	1.1	276	58.1	1.82	42.6	**Low**

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In light of mean of scores (3), this table shows that the study subjects are high knowledge with all the studied items, except with the items number (1 and 8) they are moderate knowledge and except with the items number (9 and 10), they are low knowledge.

Table 3. Overall Assessment of the knowledge of Corona virus survivors Compliance Regarding Domains of Quarantine

Main Domain	Rating	F	%	M.S	RS	Grade
Social Distancing	Good	75	15.7	1.5	50	Low
	Fair	88	18.6			
	Poor	312	65.7			
Sterilization	Good	111	23.3	1.78	59	Moderate
	Fair	150	31.5			
	Poor	214	45.2			
Healthy Food	Good	144	30.3	2.29	76.3	Moderate
	Fair	326	68.3			
	Poor	5	1.4			
Healthy Behavior	Good	450	94.7	2.91	97	High
	Fair	10	2.1			
	Poor	15	3.2			
Overall Assessment of knowledge of Corona virus survivors	**Good**	**120**	**25.2**	**2.1**	**70**	**Moderate**
	Fair	**237**	**49.8**			
	Poor	**118**	**25**			

F: Frequency, (%): Percentage, M.S: Mean of Score, R.S: Relative Sufficiency

Table (3) shows that knowledge of Corona virus survivor's responses is low knowledge at the social distancing, fair at the sterilization, and healthy food, and high knowledge at the healthy behavior. furthermore, the overall assessment for the corona virus survivor's compliance regarding domains of quarantine is moderate knowledge.

DISCUSSION

This study found an overall correct rate of 70 % of the knowledge questions among of corona virus survivor's compliance regarding domains of quarantine indicating that most students in provinces of the Central Euphrates, Iraq were moderate knowledge about corona virus disease. This

finding disagrees by Liang, et al., (2020), who also found that performance of the majority of the survivors didn't carry out or perform certain procedures in relation to infection control corona virus such as use of protective e.g., gloves, mask and use alcohol 70%. This study showed that most of the study sample are from urban residential area. This result comes because the corona virus might be occurring among individuals from urban residential area than those from rural, because huge presence of persons in the markets, overcrowding, and malls, and the lack of personal health protection, this result is supported by Hamzah, et. a., (2020). Concerning gender, most of participants in the sample study are males. This finding is consistent with that of Cirillo, (2020) who found the total of 41 (82%) of the participants were male, while 6 (12%) of the participants were female. Regarding age, the majority of corona virus survivor's (42.5%) of them were age group of (31-41) years-old There is an agreement with this current study that is conducted by Mishra, (2020). The results of study depict that two thirds of the sample are within (36-44) years old. Regarding the marital status, the majority of corona virus survivor's (61.8%) were married, Mahmood et., al., 2020 have carried out a descriptive study, presenting that (65%) of the teachers are married. Concerning academic achievement, the study results indicate that nearly half of the study subjects are Faculty and above graduated. These results are supported by Shah, et., al., 2020, the find that most of the study sample are middle educated. Also, in regarding to the study subject's monthly income, the study results show that most of the study subjects are sufficient income. While it disagrees with Luo, et., al., (2020) who stated that the highest percentage (59.5%) of responses were insufficient income.

CONCLUSION

1. The majority of infected people who lose their sense of smell and taste have a minor injury, according to the study sample.
2. Most affected people, including smokers, have a mild infection.
3. After healing from infection, infected people experience thinning, lethargy, lack of appetite, and headaches for weeks.
4. Showering and sleeping under the air conditioner are the most common sources of infection.

RECOMMENDATIONS

The study recommends that there is:

1. Good nutrition and consuming protein-rich meals, such as beef, as well as vitamin C-rich fruits.
2. Help the immune system by taking vitamin D and zinc.
3. Physical therapy and hitting the patient's back in a prostrate position, as well as a hot bath and breathing exercises, are all used to strengthen the respiratory system.
4. Drum quarantine time, personal hygiene, and adherence to preventive instructions.
5. Keeping items and surfaces clean and sterilized is important.
6. Ensure proper respiratory hygiene (such as covering your mouth and nose with your bent elbow or a tissue when coughing or sneezing, then disposing of the used tissue immediately).

7. The requirement of a 14-day quarantine period.

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