

Impact of Corona Virus on The Life Status of Kurdish People Living in Kurdistan Region of Iraq

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ABSTRACT

The novel corona virus (COVID-19) is currently one of the most common causing concerns in medical community. The aim of this study is to carry out the effect of corona virus on life status among Kurdish people in Kurdistan region. An online form (questionnaire) was used to collect the data among the researchers' social media users, especially Facebook as the main platform. 643 participated in the study and filled out the form; however, 510 forms were accepted in terms of statistical point of view. All statistical computations are enhanced using statistical method (SPSS 21). The data was coded, tabulated, and presented in a descriptive form. The finding shows that the majority of gender respondents were female aged mostly between 15-25 years old, majority were employed, 92.7%, living in Sulaimani city, which was the highest rate among all locations. 50% of the participants identified that corona virus was a threatening disease which was the highest. Followed by 22% who identified the disease as fatal. Social distancing and hand washing were the top choices for self protection against the disease. Family Connection and Relaxation were the two positive aspects of the virus, however, communication with others and safety. Were the two negative aspects of the virus stated by the respondents. 26.1% of respondents were distracted themselves from stress by connecting with loved

ones through social media followed by reading. There is a significant positive statistical correlation between (Corona Virus and life status) which is (0.846) and that the significant value is (0.000). This illustrates that only 71.6% of factors affect (life status) in (Corona Virus). As way of conclusion, corona virus has had a significant impact on the people's life status.

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1. INTRODUCTION

The novel Corona Virus (COVID-19) is a new epidemic virus that has raised a big concern among the medical community [1]. This virus is -induced pneumonia, the first report discovered in Wuhan city since 2019 [2]. The number of people living with corona virus across the world is 96,000 cases in 5/3/2020 and 3300 deaths have been reported till the date [3]. Corona virus disease can caused multiple system infections especially respiratory tract infection in humans such as severe acute respiratory syndrome and Middle East respiratory syndrome (MERS) [4]. In addition, cough and fever are the most common symptoms of this virus, some patients have also experienced other symptoms such as diarrhea and liver damage [5,6] , it brings more encounters to patients recovery [7,8]. Many people may also be asymptomatic. Usually elderly people and those with chronic disease such as diabetes, cardiovascular diseases, chronic respiratory diseases and cancer are more likely to develop respiratory distress syndrome. Droplets of saliva or contact from an infected person are the most common way of transmission. The incubation period is about 2-14 days. The rate of deaths from this virus is likely to be 2% -%3 [9] A study by Joseph et al in 2005 investigated, mental health and quality of life during the SARS pandemic situation among populations in Hong Kong,, it indicated social and family support are associated with positive impact of mental health [10]. In addition, a study conducted among Chinese populations through an online survey between January and February 2020 with about 263 participants. This study reported that the COVID-19 was associated with mild stressful impact among local Chinese aged ≥ 18 in Liaoning Province, mainland China [11]. The occurrence of corona virus over the world can led to enormous public responses; continuously social media has reported across limitations to keep all information taught about the pandemic situation. A pandemic has led to stress, and anxiety, which is the most common reaction to any distressing condition [12]. The most effective ways of protection against the virus is social distance.. Despite all the preventive measures that has been used by people, but still cause stigma. In an online survey that has been carried out in India to assess the knowledge and attitude of people regarding Corona virus, stated that over a fifth of the participants agreed that social distancing, avoiding traveling abroad, frequently using hand sterilizer are protection against the disease, However, stigma and fear are still the dominant factors that stay with them especially because of returning the recovered patients to the society [13]. The aim of this study is to carry out the effect of corona virus on life status among Kurdish people in Kurdistan region

2. METHODS AND MATERIALS

Design of the study

An online survey was conducted, form (questionnaire) was used to collect the data among social media users, especially face book as the main platform.

Data collection

The form spread around first from the researcher's network especially facebook, then to people who are connected to the researchers facebook accounts all around Kurdistan region. The form was created using Google Forms as the platform. This decision was made because; Google is a very sophisticated and very easy to use platform among online users. The platform

allows to add questions in variety of styles (multiple choice, short answer, checkbox...etc). The researchers asked everyone to answer.

Sample and sampling technique

The form reached 643 subjects. The researchers studied the forms and filtered out 133 forms as they had not filled the form completely. Know the samples are 510 respondents

Questionnaire

The Questionnaire is classified into two sections, the first section that this research attempted to find some demographic data such as (age, gender, occupation and educational level....). The second section demonstrates the data collected from the first section of the survey, in this section, 12 questions were asked about their life status during that situation of having COVID-19. The questionnaire started with the general question about the meaning of Corona virus to them, their level of fear to the disease. Then we started to ask about their social life under the stress of this disease for example: what does Corona Virus give and take away from you, how you protect yourself and how you convince and distract yourself to not become stressed while you are home. Finally, information was seeked about the benefit of staying home and social distance to change the environment for the better and to the future of this Virus.

Statistical analysis

The answers are automatically turned into useful graphs and figures that are easily extracted and can later on be used as representatives of the data. All statistical computations are enhanced using statistical method (SPSS 21). The data has been coded, tabulated, and presented in a descriptive form. The statistical procedure that was applied to determine the results of the present study included:

1. alpha-cronbach has been used for testing the reliability of the questionnaire.
2. Descriptive statistical data analysis (Demography, descriptive variables as Corona Virus and life status)
3. Inferential data analysis: Pearson bivariate correlation and Simple regression model:
This model was used to determine as: Impact of Corona Virus on the life status
-The significant level of all statistical procedures was determined at (F test), $P < 0.000$.
-There are criteria of the probability level of determining the significance of the test: P -value as:
 1. High significant ($P < 0.001$)
 2. Significant ($P < 0.05$)
 3. Non-significant ($P > 0.05$)
 4. Very highly significant ($P < 0.000$)

3.RESULTS

Reliability of Questionnaire

Reliability means accuracy, dependability, stability, and consistency of the research instrument. According to Heale and Twycross, (2015) [14], the recommended appropriate sample size is “approximately 200 individuals (or more) for a research” which implies that a sample size of 200 respondents is an appropriate sample size for the current research.

Table 1: Reliability and Validity

Methods	Result
Alpha Cronbach’s	0.915
Validity	0.837

It can be seen in the table (1) that alpha Cronbach was used to get the result of the reliability of the participations. As a result, the value of alpha Cronbach equals to (0.915) and the validity was (0.837), then the result of alpha Cronbach and validity shows the highly reliable of the questionnaire

Table 2: Demographic data

Variables	Frequency	Percent %
Gender		
Male	208	40.8%
Female	302	59.2%
Total	510	100.0
Age		
15 – 25 years old	211	41.37%
26 – 35 years old	125	24.51%
36 – 45 years old	110	21.57%
More than 45 years old	64	12.55%
Total	510	100.0
Education level		
Primary	15	2.9%
Secondary	38	7.5%
Institute	183	35.9%
College	181	35.5%
post graduate	93	18.2%
Total	510	100.0
Location		
Suleimani	473	92.7%
Hawler	19	3.7%
Kirkuk	5	1%
Duhok	3	0.6%
Halabja	10	2%
Total	510	100.0
Occupation		
Student	152	29.8%
Employed	179	35.1%
Teacher	92	18%
Unemployed	87	17.1%
Total	510	100.0

It is clear from the table (2): The majority of gender respondents were female, reaching 59.2% of the total. This means the rate of females was more than males. The percentage of males was 40.8%. The highest percentage of age was between (15-25 years old) and 24.51% and 21.57% were between (26 – 35 years old and 36 – 45 years old respectively) and only 12.55% of age was (More than 45 years old). The majority of the educational level was institute, which was 35.9%, while the college, Post graduate and secondary were (35.5%, 18.2% and 7.5% respectively) and only 2.9% was primary. Most of participants, 92.7% were living in Sulaimani city, which was the highest rate among all locations, 3.7% , 2% and 1% were from hawler ,halabja and kirkuk and the minority of location was in duhok, 0.6%. Occupational status (Employed) from the study sample came in the first rank with a percentage of 35.1%. In the second place were (Students) which was 29.8%, and 18% of the occupational were Teachers, finally, the lowest rate of occupation, which was Unemployed, 17.1%.

Table 3: Descriptive some questions

Variables	Frequency	Percent %
What does corona virus mean to you		
It is a threatening disease	255	50%
It is a fatal disease	112	22%
It is a mild disease	137	26.9%
Others	6	1.2%
Total	510	100.0
How do you protect yourself from the virus?		
Washing hands	224	43.9%
Social distancing	277	54.3%
Taking medication and vitamins	9	1.8%
Total	510	100.0
What did corona virus give to you?		
Relaxation	203	39.8%
Family Connection	224	43.9%
Self-care time	56	11%
Others	27	5.3%
Total	510	100.0
What did corona virus take away from you?		
Freedom	77	15.1%
Friendship	33	6.5%
Communication with others	177	34.7%
Economy	74	14.5%
Health	55	10.8%
Safety	94	18.4%
Total	510	100.0
How do you distract yourself from the stress of the virus?		
Reading	120	23.5%
Exercise	44	8.6%
Connecting with loved ones through social media	130	26.1%
Telephone calls with loved ones	94	18.4%
Sleeping	34	6.7%
Eating	15	2.9%
Communicating with family members/ house mates	14	2.7%
Others	56	11%
Total	510	100.0

It is clear from the table (3): It can be clear that 50% of the [articpant6s felt that corona virus was a threatening disease, which was the highest, 26.9% and 22% felt mild disease and fatal disease respectively. The majority of the participants chose social distancing as the best way of protecting themselves against the disease. which was 54.3% of the total and only 1.8% considered medication and vitamins. According to the study, 43.9% of corona virus gives family connection and 39.8% chose relaxation. 34.7% of participants felt that communication with others was the biggest scarifies that they had to do because of the virus. and 18.4%, 15.1%. 14.5% and 10.8 take safety, freedom, economic and health respectively. 23.5% was

reading to distract from the stress of virus, and 18.4% made Telephone calls with loved ones
2.7% was communicating with family members/ house mate

Table 4: Description of variables

Questions	No	Somehow	Yes	Mean	S.D	C.V	Relative importance
	NO	NO	NO				
	%	%	%				
Are you afraid of corona virus?	107	274	129	2.04	0.67	32.84	68
	21	53.7	25.3				
Have you been able to convince yourself to not become stressed? Convince by corona virus.	40	174	296	2.5	0.64	25.60	83.33
	7.8	34.1	58				
Is corona virus your life threatening virus?	15	160	335	2.62	0.54	20.61	87.33
	2.9	31.4	65.7				
Do you think that social media adds to the fear of corona? Does it make corona seem scary?	50	225	235	2.36	0.65	27.54	78.67
	9.8	44.1	46.1				
Sum	212	833	995	2.38	0.63	26.65	79.33
	10.39	40.83	48.77				

The data of Table (4) on repeat distributions (mean, stander deviation, coefficient of variance and Relative importance) indicate explanatory variables that focus on (corona virus). This variable has a mean of 2.38., standard deviation of (0.63) and the relative importance of (79.33%). The percentage of people who responded with “Yes” to (48.77%), somehow (40.83%), while the proportion of individuals who syayed “No” with the paragraphs have reached the percentage (10.39%).

Table 5: Description of variables

Questions	No	Somehow	Yes	Mean	S.D	C.V	Relative importance
	NO	NO	NO				
	%	%	%				
Do you feel like corona virus is pushing to stay clean?	14	52	444	2.84	0.43	15.14	94.67
	2.7	10.2	87.1				
Do you feel like corona virus has been able to change the environment for the better?	11	74	425	2.81	0.44	15.66	93.67
	2.2	14.5	83.3				
Do you think that we can end corona virus by staying clean and cleaning?	62	171	277	2.4	0.69	28.75	80.00
	12.2	33.5	54.3				
Sum	87	297	1146	2.68	0.52	19.8	89.4
	5.69	19.41	74.90				

The data of Table (6) on repeat distributions (mean, stander deviation, coefficient of variance and relative importance) indicate explanatory variables that focus on (life status). This variable has a mean of 2.68. a standard deviation of (0.52) and the relative importance of (89.4%). The percentage of people who responded with “Yes” to (74.90%), somehow

(19.41%), while the proportion of individuals who stated “No” with the paragraphs have reached the percentage (5.69%).

Table 6: A relationship between Corona Virus and life status

Corona Virus - life status			
life status	Corona Virus		life status
	Correlation	1	0.846
Sig.		0.000	
Sample	510	510	
Corona Virus	life status		Corona Virus
	Correlation	0.846	1
	Sig.	0.000	
Sample	510	510	

The level of significance at level 0.05

There is a relationship between the statistical function between the Corona Virus and life status

Ho: There isn't a relationship between Corona Virus and life status

H1: There is a relationship between Corona Virus and life status

It is noted from Table (6) that there is a significant positive statistical correlation between (Corona Virus and life status), which is (0.846) and that the significance value is (0.000) and is less than (0.05). This indicates acceptance of the second hypothesis, because a positive correlation between the (Corona Virus and life status).

Table 7: Regression analysis of a dependent variable (life status) Impact of Corona Virus on the life status

Model	Coefficients				Model Summary			ANOVA Table	
	Unstandardized Coefficients		T Test	Sig.	R	R ²	Adjust R ²	F Test	Sig
	B	Std. Error							
Constant	0.232	0.065	3.594	0.00	0.846	0.716	0.715	1279.67	0.00
Corona Virus	0.918	0.026	35.773	0.00					

Ho: There isn't the Impact of Corona Virus on the life status

H1: There is the Impact of Corona Virus on the life status

This table indicates that the regression model predicts the dependent variable significantly well. This indicates the statistical significance of the regression model that was run. Here, the (p-value) was (0.000), which is less than 0.05, and indicates that, the regression model statistically significantly predicts the outcome variable (it is a good fit for the data). This means that the method is possible to be used to analyze this data and this indicates acceptance of the alternative hypothesis.

The R^2 value indicates how much of the total variation in the dependent variable (life status), can be explained by the independent variable (Corona Virus). In other words, R Square for this study is (0.716). In this case, 76.2% can be explained, which is very large.

In other words, this indicates that 71.6% of the variance of (life status) has been explored in (Corona Virus), this illustrates that only 71.6% of factors affect (life status) in (Corona Virus) and the other variables (28.4%) are due to random error.

4. DISCUSSION

Corona virus was a life changing disease for everyone and everything around the world. It had its pros and cons. Even though. It was a significant health hazard for humans, but it was able to clean the environment. The virus stopped the life of humans in many countries; however, it was able to restart the life of many other species that used to share the planet with humans. CONVID-19 also had its benefits for humans, it brought families together, stopped many wars and made equality among the different classes in society. However, it did have sever impacts on the mental, financial and the safety status of humans. All of this was the motivation for the conduction of this study. The aim of the research is to find the impact of the virus on the life status of citizens in Kurdistan, Iraq.

Similar to other public health concern for people, corona virus can lead to levels of anxiety and stresses [15].

Regarding the importance of psychological variables, the current study indicated that %25.3 of participants were frightened from COVID-19. Fear is not the highest impact of corona virus; it has been stated that stress is also another factor when it comes to this pandemic situation. These are inconsistent with the result of a study [16]. In an online survey of 808 U.S. among adults, stated that approximately 56% of participants were worried or very concerned about the COVID-19 in the U.S. Similarly, a group of researchers asked a number of medical students from the College of Medicine at King Saud University and found that the majority of the subjects fear the disease, interestingly majority 87% of them were female student [17].

Regarding awareness about COVID -19 pandemic, this study found that most of the participants (%43.9) were aware of the basic elements of the disease. This study's responders reported that the current use of hand washing indicates the increasing concern of participants toward personal hygiene measure to avoid the virus. This finding is consistent with [18] the study conducted in Indian which stated that 97% participants were frequently washing their hands to stop the COVID- 19.

In term of social distancing, the majority of the participants in this study reported that more than (54.3%) of the participants agreed that social distancing is a significant impact to avoid the disease. This finding is consistent with the study which indicated that awareness about COVID-19 is reflected in their attitude and behaviors considerably as most of the Chines participants (about 98%) agreed with social distancing [18].

This study represents that, most of the participants stated that corona virus has the highest (% 83.3) impact to change the environment for the best. This result is supported by a study form China. The study reported that the corona virus can prevent the environment form pollution and significantly contributes in reduction to global carbon emission [19].

In this context, social media may be one of the most important impacts on mental health. This study stated that social media was responsible for spreading fear of COVID-19 among participants, which is about (% 46.1) of all individuals. This finding is consistent with [20], the MERS outbreak period, which indicated that social media can influence largely express negative words like fear and anxiety with respect to the infectious disease. In contract, as in the locked down situation, social media is the main source to gain information about COVID-19 in about half of the population [21]. In a two similar studies on MERS was consisted results that social media is a main source of information among health care professionals [22, 23].

5. CONCLUSION

As way of conclusion, this study showed that corona virus has had a significant impact on the life status of citizens in Kurdistan, Iraq. The results showed that the majority of the subjects were suffering from mental instability as the cause of the epidemic. Social distancing was chosen as the best way to protect themselves and their families from the contagious virus. CONVID-19 changed the world in many ways. Despite its many negative impacts, it will be able to have long term benefits for humans, the planet and the different species.

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