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The Effect of Social Media on COVID-19 patients among Iraqi People

Graduation Project

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أَعُوذُ بِاللَّهِ مِنَ الشَّيْطَانِ الرَّجِيمِ

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وَقُلْ رَبِّ زِدْنِي عِلْمًا

صَدَقَ اللَّهُ الْعَظِيمِ

سورة طه جزء من الآية ﴿١١٤﴾

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Dedication: -

Every challenging work needs self-efforts as well as Guidance of elders especially those who were very close to our heart. Our humble effort we dedicate to our family, our loved

Ones, everyone who contributed to getting us here. Special Big thanks to supervisor Dr. Samah Ahmed Kadeem for her guidance, encouragement, help & support.

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Abstract

Background

The coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Cases of COVID-19 first emerged in late December 2019, when a mysterious illness was reported in Wuhan, China. The cause of the disease was soon confirmed as a novel coronavirus, and the infection has since spread to many countries worldwide and has become a pandemic disease. . Social media is considered a critical source for health information in some countries, especially during infectious disease outbreaks .

Material and Method:

An online, self-administered, anonymous, questionnaire based, cross-sectional survey was conducted via Google Forms, the survey contain 22 questions, that published in social media around Iraq, the survey recruited 556 participation 427 of them at age of 15-25 At period time from 28 December 2022..... to 10 January 2023.

Result :

the result 556 response ,Data were analyzed using SPSS version 22 and the results expressed as counts and percentages.

conclusion:

Public communication sites include many aspects, including negative and positive . At the beginning of the Corona pandemic, it was moving in a negative direction due to the lack of sufficient information about the disease and ways to deal with it and prevent it, but after a period of time it took a positive and encouraging side about methods of prevention and

treatment of the disease and how to manage time during Corona pandemic.

Introduction:

The coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Cases of COVID-19 first emerged in late December 2019, when a mysterious illness was reported in Wuhan, China. The cause of the disease was soon confirmed as a novel coronavirus, and the infection has since spread to many countries worldwide and has become a pandemic disease.(1)

COVID-19 Cases in Iraq

Prior to the outbreak of COVID-19, people already relied on social media to gather information and news, and since the outbreak in December 2019, people in many countries have relied on social media to obtain information about the virus. In addition, people in Iraq depend on social media. Internet use is strongly associated with behaviors related to health information; users write about their health on various social media platforms. Therefore, internet data, including data from social media platforms such as Twitter, have been used extensively in the past 20 years to study health patterns and better understand infectious disease outbreaks, a field known as infodemiology or (if used as surveillance tool) .(1,2)

Today's widespread uses of technology and internet access have allowed healthcare communication to expand on a global scale. Social media is considered a critical source for health information in some countries, especially during infectious disease outbreaks . Social media can be useful in communicating information on emerging infectious diseases and medical information, positively impacting people's perceived risks and decision-making processes .(3)

That Several websites have published information about COVID-19 and have given different instructions to their users about ways to prevent the spread of the virus, such as keeping a distance between themselves and others, using masks, and washing their hands. Social media has become a source of disseminating information to the public. Many individuals will experience isolation during hospitalization or when quarantining at home. Social media can be an efficient source of information and an effective means for staying abreast of the vast amount of medical knowledg. (3)

Materials and Methods:

An online, self-administered, anonymous, questionnaire based, cross-sectional survey was conducted via Google Forms, the study includes survey contain 22 questions, that published in social media around Iraq, the research recruited 556 participation 427 of them at age of 15-25 At period time from 28 December 2022..... to 10 January 2023 Most of them female gender

At college stage, Samples were selected in a stratified, random sampling design that It includes all segments of society. The questionnaire consisted of demographic data and data about the role of social media sites during the Corona pandemic. A questionnaire, containing open-ended and close-ended questions, was administered to the subjects. Data were analyzed using SPSS version 22 and the results expressed as counts and percentages.

Discussion:

The Applications that most people's use to obtain information As in (table 1) Social media and websites provide many different services that are useful for people's needs, especially during the pandemic period People continuously used Google to search for information about coronavirus especially for symptoms, protection, and treatment

It helps people find useful information and keep them away from misunderstandings and fake news (rumors) (4)

according to our survey, **52.6%** of people were using Google as a source of information

Other social media apps such as Instagram, and Facebook came in. **32% ,23.3%** respectively (unlike other statistics made in 2022 it claimed that Facebook was at the top with 2.9 billion and came in fourth place Instagram with 1.9 billion (5)

Looking back to stat during the pandemic number of people using social media increased to about 4 billion it had a main role for many who were suffering during quarantine by helping them to contact long-distance friends learn skills, have fun

Other social media apps came into **16.1% -15.7 %- 13.7% - 3.7%**for TV, you tube, telegram, and tweeter.

How social media effect on psychological state during the corona crisis As in (table 3) Many studies about the effect of social media on mental health found that there's an increase in the incidence of depression due to the long time people were spending on social media affected by fake news and rumors (6)

(**30.9 %**) of people in our survey chose depression as main effect of social media on their mental health), number of deaths and infection statistics leads to spreading of fear among people (fear came in **24.5%**) where

(**81.3%**) of 556 of responses were checking these statistics daily to keep them aware about the updates and progressing of covid-19.

Other reasons came in **48.6 %**

Such as loneliness and anxiety ABC News agreed with as through reported a poll claiming that in the age of social media, anxiety about the coronavirus spreads faster than the virus itself, (7)

and WHO claims that covid_19 pandemic caused to increase in the rate of anxiety by **25 %** (8)

When we talk about the rumors **72%(figure 2)** of the responds agreed that social media had a major role in sharing rumors and wrong information about symptoms, treatment, and protection from the virus, therefore media use people's fear as a chance to publicize these rumors for economic and fame purposes, some experts agreed with as and suggested that the indirect downfalls that caused by the rumors, conspiracy theories and misunderstanding about general health had an effect on people more than the virus its Self.(9).

and as a result of these consequences social media start to impose some protocols to limit through several restrictions on covid_19 content for example Facebook and Instagram began to block all advertisements related to Covid virus, Mark Zuckerberg the CEO of Facebook claimed the app will delete comments that contain conspiratorial interpretation or false information and add a new button for corona related content to questionable about its validity, which is "fact check"

they promote an official online site containing reliable information about the virus, which is mainly sourced from the World Health Organization and the data of the ministries of health,

so when people try to search for things related to coronavirus will move out to this website, these protocols help to get a trusted source to make sure about information (where 75 % of our) (**Figure 3**)

responses make sure to check the information and the source (10)

Most rumors about protection from virus corona that we received from the responses as in (table 4)

that if You have been infected with the Corona virus, so you are immune from infection again was about **55,8%**

thinking that they will have antibodies protect them from being infected again

Eating garlic prevents infection with the Corona virus came around **46.6%**

where PhD Amir Abdoli discuss then huge spreading of rumors which claim

that consumption of certain foods and beverages (eg, lukewarm water, alcohol, garlic, onion, ginger, and sea lettuce), which has been reported to be effective against COVID-19. Furthermore, he takes about strange methods, including the application of sesame oil into the body, normal saline and smoking harmala have been recommended for the prevention of Covid -19. (11)

Infective particles from patient don't spread for more than 1 meter came into **27%**

People thinking that due to the rules of social distance

They pointed out that most of this spray falls on the ground after traveling a distance of between one and two meters.

Therefore, it is believed that the greatest danger comes from transmission by someone coughing in front of you from a close distance, or from touching surfaces that have been subjected to droplets from coughing and then touching the face with the hands after that.(12)

Rinsing the nose with saline solution prevents corona virus came into **26.4%**

There were videos advising washing the nose or gargling with a saline solution to kill the virus and prevent it from entering the lungs

Inhaling water vapor leads to prevention of corona virus came into **26.4%**

Where the publication explained, with illustrated practical steps, the use of hot air to the nose and throat as a sterilization process to kill the virus.(13)

Drinking water with salt leads to the death of the virus came into **19.8%**

Medical studies claim that

Beverages, especially drinking water regularly, as well as hot drinks such as tea and warm water, claiming that water and heat kill the virus, and some anonymous publications on communication sites recommended the need to keep the mouth moist and drink water every 15 minutes, given that this will help push the virus towards the esophagus and stomach, where Stomach acids destroy it.(13)

Here The most widespread rumors about Corona we received from respondents in our survey as in(table5)

An artificial virus to hit the economy of countries came into **68.3%**

Where the source Supports our results there is doubt there is technical error lead to spread virus corona accidentally from a laboratory in the central Chinese city of Wuhan where the virus was first recorded.(14)

High summer temperture lead to end the virus came into **(46.6%)**

Because physicians calimed that hot temperture end the virus without rely on trusted source or that just interfernce the fact that spreading of the virus in cold countries (Europe, united states) and CBC agree us furthermore they claimed

Many infectious diseases spread or recede in certain seasons of the year; such Norovirus is more common in the colder months, while typhoid is more common in the summer.(15)

There is no virus

Symptoms of the disease are normal flu symptoms came in to **34.4%** and **27.5%**

respectively, maybe they are nearly the same symptoms of corona virus and seasonal flu like cough, fever, pain

People think they are the same, added to that the Rebecca Harris in source talk about the rumors that.(16)

We don't need to worry of COVID-19. It's just the same as the normal winter cold and flu season. and she clarified the fact COVID-19 is not the same as winter cold or flu illness - in many ways it's much worse. Seasonal flu has been around for a long time, so scientists and doctors know a lot about it and how to treat people who have the illness.(16)

vaccinations

As in (table 8) When we talking about vaccination **85.3%** of response of our survey, they were vaccinated **14.7%** Who did not receive vaccine **63.53%** of them attributed they are anti vaccinated to other reason such as

Rapid approval process for vaccines Traditional news channels including TV and trusted online content do not reach the anti vaccination group with YouTub and Facebooks dominating their media consumption .(17)

While **31.7%** were attributed to fear from safety or Fear of long-term complications of receiving the vaccine.

And others social media rumours about the vaccine came into **12.7** percent (17)

According to our survey the most spreading rumour about vaccine as in (table6)

The vaccine lead to infertility (72.1 %)

The Washington Post said, Monday, February 23, 2021, that despite the lack of scientific evidence, the misinformation was able to influence women's decision to receive the vaccine, attack the placenta.

Because the vaccine is believed to cause the immune system to attack the placenta. Unlike the fact there is no evidence that COVID-19 vaccines can affect a woman's fertility in any way.

Some participants became pregnant after receiving the COVID-19 vaccine and have not reported any significant side effects to date. Real-world COVID-19 vaccine studies have not found any safety issues for the mother or child during pregnancy or while breast feeding.(18,19)

Corona vaccines are not safe because they have not been subjected to sufficient studies came into (43.3%)

Technically this true

Vaccines are for emergency use and have not been fully approved

the only reason is that the US Food and Drug Administration, and other drug agencies in the world, want to have more time before the final, permanent approval of a drug.

Dr. Paul Offit, a member of the Vaccine Advisory Committee at the Food and Drug Administration, said that the standards that apply before issuing emergency approval of a vaccine are the same as those applied before issuing final approval, but it was necessary to issue emergency approval to protect the hundreds thousands of people who were infected every day .(20)

and who claims that Vaccine will cause gene mutations came into (43%)

Where the fact

that Social media users shared posts warning about covid vaccines that being developed, stressing that the Covid-19 vaccine causes genetic damage to the cells of the body that cannot be repaired, and that it creates

genetically modified humans, crime against humanity, and doubts about the details of the experiments of this development

The mRNA from the COVID-19 vaccine never enters the nucleus of the cell, which is where our DNA is stored. This means that the mRNA does not affect or interact with our DNA at all.

and never caused genetic alteration .(21,22)

There is a control chip in the vaccine came into (26.6%)

Social media show

Videos of people showing a **magnet sticking** where they say they got their coronavirus vaccine have garnered millions of views on social media platforms like TikTok and Instagram.

Some say there must be something magnetized in the vaccines, and others go so far as to say that it is evidence of a chip, which is not.(24)

Those who have been infected with the disease do not need a vaccine came into (26.3%)

Some people say they don't need the vaccine after infection

Where the fact

Even if you were infected with the Corona virus previously, you still need the vaccine because it is very possible that the immunity resulting from the vaccine will be greater than that resulting from a previous infection.

Most of people need protection and take vaccine to be fully protected from infected again.(25)

social media help us overcome corona crisis as in (table 7)

Dependency on social media and knowledge on health safety represented the first factor explaining awareness of COVID-19 symptoms, spread, and transmission, as well as sanitization. These items revealed that social media played a significant role in preparing mankind for COVID-19,

Experts and beginners alike use social media to share their sensible and irrational viewpoints Moreover, a recent study discovered that internet-based smartphone use can improve the perceived quality of life through facilitating positive social media connections, online shopping, online conferencing, and constant interaction with friends and family living in different countries

according to questions in our survey of positive impact of how social media help through pandemic

Knowledge of protection ways came into (62.4%)

Social media is considered a critical source for health information in some countries, especially during infectious disease outbreaks. Social media can be useful in communicating information on emerging infectious diseases and medical information.

That Several websites have published information about COVID-19 and have given different instructions to their users about ways to prevent the spread of the virus, such as keeping a distance between themselves and others, using masks, and washing their hands furthermore Advertising using celebrities covering their faces with masks can persuade people to wear face mask to promote health behaviors.(26)

Know the symptoms of disease came into (55.5%)

tracking COVID-19 symptoms in social media data over time gave us novel insights to understand the full clinical spectrum of symptoms and the patient journey.(27)

Communicate with those who are far away during the quarantine period came into (48.4%)

Social media presents a chance for people, friends and family to reset & reconnect at a time of isolation and critical physical distancing. For example, people use social media platforms to find old friends and distant relatives and reconnect with more time on their hands. The nature of social media platforms makes it easy to find people that share the same

connection with us, such as people has mutual friends, go to the same school, work, university .(28) **Vaccine promotion came into 46.6%**

Through Social video platforms that could play an active role in the vaccination promotion for the youth, Disseminating Vaccine Information through Twitter

The need to increase communication intensity in spreading information about the COVID-19 vaccine is becoming more imperative in recent days, People who take vaccine share their motivations and how they were informed in their decision-making process. The messages have been shared widely on social media to encourage others to get vaccinated and protect themselves from severe and potentially long-term impacts of COVID-19, and this personal experience help to get vaccine. (29)

Further more Organizing Important Fundraisers

Just like it usually happens with any major crisis, social media helps people unite and fight together.

More and more fundraisers are being organized to help those in need. People are helping hospitals struggling to tend to all their patients by providing funds for the necessary personal protective equipment and medication.

They're also **helping individuals who lost their jobs**, local businesses that can't afford paying their employees while their doors are shut, and the elderly who can't leave their homes to buy groceries.(30)

The skills development, distance working have reached 20%, 25%, respectively in the resposed of our survey ,Social media has been a blessing in this tough time for millions. It has been an excellent platform to enhance interaction and study collaboratively. Teachers can now create interactive lectures, graphical contents, and motion pictures, as well as use diversified digital tools to enable students to grasp lessons quickly.(30)

Conclusion:

Social media is a double-edged sword,

Although its negative impact in causes anxiety, depression and fear due spreading of rumours that promoted by social media

Communities get over this negative effect by taking some protocols that we talked about previously.

Its has also a positive impact through many advantages such, contact with long distance loved once, get over education problems by online classes, self-development, learn skills based on their interest and keep people aware through quarantine about general health state, mental state and vaccines development etc...

Through survey and out of its results we found that social media had more positive effect than negative.

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