

## ATTITUDE ABOUT THE ROLE OF MEDIA IN INCREASING AWARENESS REGARDING COVID-19 AND PRACTICING RELATED PROTECTION MEASURES AMONG A SAMPLE OF KURDISH PEOPLE IRAQ

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### ABSTRACT

**Introduction:** Since December 2019, the (COVID-19) epidemic has swept the world, causing widespread burden and increasingly hospitalizations. While public health and healthcare officers rushed to identify and incorporate the unfold of the virus, information was spreading uninhibited over traditional and social media program at a patently rapid pace. The objectives of the study were to 1) assess the attitude of Kurdish people regarding role of media in awareness regarding COVID-19 and practicing protection measures by them, 2) find out the association of their attitude with their sociodemographic characteristics.

**Materials and methods:** it is a descriptive, cross-sectional study that started from 1-3-2020 to 1-6-2020. The sample size was included, 420 participants. Data were collected through a distributed Google-based questionnaire. The questionnaire consists of three main parts: socio-demographic characteristics, the role of mass media for prevention of COVID 19 and practicing of protection measures. The data were analyzed through the application of SPSS program version 23. Frequency, percentage, and chi-square tests were used.

**Results:** The majority of participants depended on internet and social media to obtain information about COVID-19 and they are agreed that media has role on increasing awareness. Media encourage the majority of them to practice protection measures at least some of them. There was significant association between sociodemographic characteristics of sample with their attitude and practice regarding COVID-19.

**Conclusion:** Media, specially social media have important roles in increasing awareness and obtaining information, regarding COVID-19 and encouraging people to practice the protection measures in the Kurdistan Region of Iraq.

**Keywords:** Attitude, media, protection measures, awareness, COVID-19.

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### Introduction

Since December 2019, the coronavirus disease 2019 (COVID-19) epidemic has swept the world, causing widespread burden and increasingly hospitalizations<sup>(1,2)</sup>. While public health and healthcare officers rushed to identify and incorporate the unfold of the virus, information was spreading uninhibited over traditional and social media program at a patently rapid pace. Both the impact of the dis-

order and the dearth of information associated with it allowed medical misinformation to unexpectedly floor and propagate on numerous social Media program. Thus, social media refers to computer-mediated technology facilitating the growth and sharing of ideas, awareness, career interests, information, and other methods of expression through social networks and virtual communities<sup>(3)</sup>.

Previous reviews have highlighted a similar trend during recent public fitness emergencies, par-

ticularly the Ebola and Zika outbreaks<sup>(4,5)</sup>. Such a phenomenon is alarming on both man or woman and public fitness tiers to an extent that governing bodies are realizing its gravity and attempting to limit its effects<sup>(6,7)</sup>. Distortion can be defined as a “claim of truth this is presently false because of lack of clinical evidence”<sup>(8)</sup>. It propagates without constraints, does not entail any duration or peer-review, and does not require any professional verification. This makes it best to unfold on social media and grow to be amplified by using the data silos and echo chambers of personally tailor-made content, specifically throughout times of public anxiety like the contemporary COVID-19<sup>(9)</sup>.

A desirable emergency verbal exchange plan encourages network leaders and stakeholders to devise now for a COVID-19 outbreak and other varieties of emergencies. Before an outbreak occurs, focus on raising awareness and educating audiences about non-pharmaceutical interventions (NPIs) and other public health respiratory infection-prevention strategies. Identify key community relationships and leverage them to help teach and prepare audiences<sup>(10)</sup>. The conversation needs to be early, empathetic, accurate, and effective. Early communication of COVID-19 data facilitates limited misinformation and rumors that would contribute to confusion and fear. Empathetic communication conveys situation and reassurance, empowers people, and decreases emotional turmoil.

Accurate communication affords the information approximately a state of affairs and what's being finished to solve it. Effective communiqué helps build knowledge and guide the public, media, healthcare providers, and other companies in responding to COVID-19 and complying with public health speaking to children about how many tales approximately COVID-19 on the Internet may be based totally on rumors and inaccurate records<sup>(11)</sup>. WHO is operating with diverse social media platforms, inclusive of Ticktack, to help to reach the right audience (the right community, the proper age group, etc.) in addition to discover the spread of misinformation on the brand new coronavirus? We understand that distinct platforms may have their particular audience, hence crucial to make trustworthy facts available in which people are seeking out it Since the outbreak of the virus in China ultimate December, unverified movies and rumors have circulated widely on platforms including Ticktack (a social network for sharing user-generated videos, mostly of people lip-synching to

popular songs), Twitter, and Facebook as well as We Chat and Weibo, which can be very popular in China. Along with Ticktack, Facebook and Twitter have announced techniques attempting to establish a firewall in the direction of the "infodemic" the WHO and the agency's director-public, have highlighted. (12). In Kurdistan region of Iraq, the majority of people in any educational and professional level depend on news on TV and social media, specifically Facebook. As lockdown is started from end of February 2020 in Kurdistan region of Iraq, all medias in Kurdistan started to prepare and share different types of program related to COVID-19 in order to increase people awareness and encourage them to apply protection measures. The present study aimed to assess the attitude of Kurdish people regarding role of media in increasing the awareness of people regarding COVID-19 and encouraging them in using protection measures, as well as finding association of their attitudes with their sociodemographic characteristics.

## Methods

The present study is a descriptive, cross-sectional study design ,the data were collected through an online distribution of questionnaire forms by sending the link of the form to friends and relatives of researchers and mostly to students and academic teachers (through Viber) form in 1 April to 15 May 2020. It designed in English language but translated into Kurdish language for the study sample. It is exposed to near 800 people. Only 420 responded . The inclusion criteria were ability to fill the form online. Students and academic teachers from medical and health colleges were excluded. The questionnaire which used for data collection consisted of three main parts. part one is related to the socio-demographic characteristic which include age, gender, marital status, education level, residency and occupation, second part consisted of items related to the role of mass media for prevention of COVID 2019 (scoring as 1 for agree, 2 for I don't know, and 3 for disagree), third part included items related to their practices regarding protection measure of COVID 2019 prevention (Scoring as 1 for always, 2 for some times , and 3 for never). The items of attitude part and practice of protection measures from the aviliable litratures regarding COVID-19 specially Wolrd Health Organization (WHO) website. The researcher has taken permission from the ethical and scientific committee of the College of

Health Science in Erbil city. There was no asking information regarding name of participant and purpose of the study and free to fill or not filling the questionnaire was explained at first. The data were transferred to Excel sheet of the google and then to SPSS (Statistical Package for Social Science) program version 23 for analysis which, included , frequency, percentage and chi-square test.

**Results**

Table 1 indicated the demographic characteristics of the sample study as followings: more than half of them were between 18-27 years old, female and single. Majority of them were graduated from college . Most of them were from urban which represented 59.8%, regarding occupation the highest percentage of them were workless that represented 36.2%.

Variables	Frequency	Percent
<b>Age group</b>		
18-27	227	54.0
28-37	138	32.9
38-47	39	9.3
≥ 48	16	3.8
<b>Gender</b>		
Female	222	52.9
Male	198	47.1
<b>Marital status</b>		
Marriage	197	46.9
single	220	52.4
widow	3	.7
<b>Level of education</b>		
Basic	13	3.1
Secondary school	48	11.4
Institute	54	12.9
College and above	305	72.6
<b>Residency</b>		
rural	136	32.4
suburban	33	7.9
urban	251	59.8
<b>Occupation</b>		
Business	22	5.2
Governmental employee	139	33.1
Private employee	97	23.1
work less	152	36.2
worker	10	2.4

**Table 1:** Socio-demographic characteristics of the study sample.

Table 2 indicated different sources of information for people about COVID-19 as following: 56.9% of them depending on social media, 32.9% of them depending on internet, 6.2% of them depending on health care providers and 2.4% of them

depending on TV for obtaining their information and 1.7% of them depending on relatives.

Sources of information	Frequency	Percent
Health care providers	26	6.2
Internet	138	32.9
Social media (Facebook, twitter, Instagram..)	239	56.9
Relative	7	1.7
TV	10	2.4

**Table 2:** Source of information regarding COVID-19.

Table 3 indicated that the participant’s attitudes about role of media including social media about increasing awareness toward COVID-19. The majority agree with these items “Mass media is important for increasing awareness regarding prevention from COVID-19 (77.4%), Social media sometime may include wrong information regarding COVID-19 (78.8%), and Official media is the only reliable source for information about COVID-19 such as WHO, CDC, and those media which nurses, physicians and health authorities are guiding them (68.6%). Half of the study sample (51%) disagreed that new technology of communication has roles in decreasing of fear among population about COVID-19.

Items	Responses		
	Agree No (%)	Disagree No (%)	I don't know No (%)
Mass media is important for increasing awareness regarding prevention from COVID-19.	325(77.4)	48(11.4)	47(11.2)
Twitter, Facebook, personal account and Instagram for COVID-19 information are useful.	234(57.9)	108(25.7)	69(16.4)
Mass media may sometime give false information about COVID-19.	245(58.3)	122(29)	53(12.6)
Mass media are useful in this critical time and stressful situation due to COVID-19.	179(42.6)	143(34)	98(23.3)
Social media sometime may include wrong information regarding COVID-19.	331(78.8)	39(9.3)	50(11.9)
Mass media was able to give complete information regarding outbreak of COVID-19.	149(35.5)	182(43.3)	89(21.2)
Official media is the only reliable source for information about COVID-19 such as WHO, CDC, and those media which nurses, physicians and health authorities are guiding them.	288(68.6)	92(21.9)	40(9.5)

**Table 3:** Attitude regarding role of media in increasing awareness toward COVID-19.

Table 4 indicated that the majority of them have always practiced following protection measures: avoiding from crowded places (83.8%), washing hands with alcohols 70%, or soap and water (83.3%), wash hands before and after meals (85%).

near half of the study sample never practiced social distance (44.3%), clean the key of car or house (40.5%), reading labels of clean products before use (40.5%).

Items	Reponses		
	Always No (%)	Sometimes No (%)	Never No (%)
Usually I wear mask, glasses and gloves when I go out	205(48.8)	45(10.7)	170(40.5)
Always I avoid from crowded places	352(83.8)	8(1.9)	60(14.3)
I wash my hands with alcohols 70% , or soap and water .	350(83.3)	2 (0.5)	68 (16.2)
Always I try to increase the distance between me and others more than 1.5 meters when I was out of house.	222(52.9)	12 (2.9)	186 (44.3)
Usually I use Cloth while sneezing and coughing.	275(65.5)	18(4.3)	127(30.2)
I wash my hands before and after meal	357(85)	61(1.4)	57(13.6)
Usually I clean high touch surface in my office and house.	258(61.4)	9(2.1)	153(36.4)
I try to clean key of my car and key of doors in my house when I was out of my house.	188(44.8)	62(14.8)	170(40.5)
I usually read labels of clean products before use.	209(49.8)	23(5.5)	188(44.8)
I avoid sharing household items as cup glasses... etc.	187(44.5)	103(24.5)	130(31)

**Table 4:** Prevention measures practice regarding COVID-19 among study sample.

Table 5 indicated that there was a significant association between age, gender, marital status , level of education and residency with attitude items.

Items of attitude	Age group	Gender	Marital status	Level of education	Residency
	P-value	P-value	P-value	P-value	P-value
Mass media is important for increasing awareness regarding prevention from COVID-19.	0.020	0.351	0.420*	0.709	0.245*
New technology of communication has roles in decreasing of fear among population about COVID-19.	0.019	0.001	0.003*	0.135	0.074
Twitter, Facebook, personal account and Instagram for COVID-19 information are useful.	0.026	0.001	0.041*	<0.001	0.462
Mass media may sometime give false information about COVID-19.	0.280*	0.001	0.83*	0.261	0.110
Mass media are useful in this critical time and stressful situation due to COVID-19.	-----	0.020	0.353*	0.049	<0.001
Social media sometime may include wrong information regarding COVID-19.	0.002	0.048	0.609*	0.040	0.005*
Mass media was able to give complete information regarding outbreak of COVID-19.	-----	0.007	0.001*	0.006	0.260
I have depended on official media only for COVID-19 as WHO, CDC, nurses, physicians and health authorities.	0.261*	0.001	0.195*	0.039	0.063*

**Table 5:** Association between attitude of the sample regarding role of media in prevention of COVID-19 and their socio-demographic characteristics.

Items of attitude	Age group	Gender	Marital status	Level of education	Residency
	P-value	P-value	P-value	P-value	P-value
Usually I wear mask, glasses and gloves when I go out	0.001	0.105	0.809*	0.025	0.014
Always I avoid from crowded places	0.040*	0.053*	0.690*	<0.001*	0.233*
When I return back to my house before entering house I wash my hands with alcohols 70% , or soap and water .	<0.001	0.231*	0.262*	<0.001*	0.245*
Always I try to increase the distance between me and others more than 1.5 meters when I was out of house.	<0.001*	0.438	0.171*	0.125*	0.031*
Usually I use Cloth while sneezing and coughing.	0.005*	0.001	0.059*	<0.001*	0.166
I wash my hands before and after meal	0.193*	0.464*	0.816*	0.003	0.300*
Usually I clean high touch surface in my office and house.	0.038*	0.001*	0.133*	0.01	0.680*
I try to clean key of my car and key of doors in my house when I was out of my house.	<0.001	0.601	0.004*	<0.001	0.090
I usually read labels of clean products before use.	<0.001	0.793	0.001*	0.005*	0.863
I avoid sharing household items as cup glasses... etc.	0.105	0.009	0.001*	0.033	0.125

**Table 6:** Association between applying preventions measurers of the study sample and their socio-demographic characteristics.

Table 6 indicated that there was a significant association between age, gender, marital status, level of education and residency with protectin measures practice.

## Discussion

The present study find out the attitude of a sample of Kurdish people regarding role of media for giving information regarding corona virus and COVID-19 and practicing the protection measures as a result of that. The findings indicated that the literate people mostly depend on media and social media and according their sociodemographic characteristics their attitude and practice of protection measures are different.

Regarding the source of getting information the most of the sample depending on social media(Facebook, Twitter, and Instagram), which represented 56.9% for obtaining information about COVID-19, while only 1.7% of them depending on their relatives for obtaining information about COVID-19. Jarynowski et al (2020) studied the perception of COVID-2019 epidemic in Polish society using quantitative analysis of its digital footprints on the Internet on platforms. They concluded that traditional and social media do not only reflect reality, but also create it. For a greater impact, social media should be used because public information campaigns might have less impact on society than expected<sup>(13)</sup>.

Rapidly detect and respond is needed to public rumors, perceptions, attitudes and behaviors around COVID-19 and control measures. The creation of an interactive platform and dashboard to provide real-time alerts of rumors and concerns about coronavirus spreading globally would enable public health officials and relevant stakeholders to respond rapidly with a proactive and engaging narrative that can mitigate misinformation. Social media can and should be harnessed to support the public health response<sup>(14)</sup>.

More than half of the study sample in the present study agreed that social media sometimes give misinformation. Results of a study conducted for search on Twitter using 14 different trending hashtags and keywords related to the COVID-19 epidemic indicate that medical misinformation and unverifiable content pertaining to the global COVID-19 epidemic are being propagated at an alarming rate on social media. The researchers provide an early quantification of the magnitude of misinformation spread and highlight the importance of early interventions in order to curb this phenomenon that endangers public safety at a time when awareness and appropriate preventive actions are paramount<sup>(15)</sup>. WHO is working now with various official media in governments to disseminate right information for

public and to put perfect platforms for that, to help population reach the right audience (the right community, the right age group, etc.), as well as to detect spread of misinformation on the new coronavirus<sup>(16)</sup>.

According the results of the present study attitude regarding role of media about COVID-19 and related protection measure practice is significantly associated with some sociodemographic characteristics such as age, gender, education level, residency and marital status. These imply that the messages which delivered by media and is distributing through social media have to be fit to the receiver characteristics to be effective. Since in the community there are different age group and different levels of education therefore they are not equally deal with COVID-19 regarding prevention measures and change lifestyles to deal with COVID-19 in spite of that role of different types of media is important in behavior change if the information is valid and correct about COVID-19 as mentioned in health report<sup>(17)</sup>. The WHO report about COVID-19 was conformed and monitored different sources of information about COVID-19 to ensure that information is valid and may beneficial for the public to deal with COVID-19<sup>(18)</sup>.

The limitation of this research included (COVID-2019 is a new health problem that needs new responding and adaptation by the population through hearing official and correct media. The disease is contagious and the quarantine procedure, precautionary measures are strict by the Kurdistan Regional Government, so we have applied online application to collect data in the society of Kurdish people in the Kurdistan Region of Iraq.

## Conclusion

Media, especially social media has important role in giving information to people in pandemic situations. It is the speediest way to present the necessary information and encouraging people for practicing protection measures. At the same time, social media have an enormous potential in spreading and diffusing information. The real problem is very often contents are transmitted are fake or only side opinions. The hope is people understand and improve their capacities to use properly internet and social media and search and follow the objective news sources. In this case, about COVID-19), every government countries have used social media to diffuse their communication to limit Coronavirus spreading with a discrete success. On the other hand, uncontrolled social media use and social limitation have protect-

ed people from virus contagion but have caused social isolation and depression. People with different social demographic characteristics are different in attitude regarding the role of media and practicing protection measures. Further research has to be done to understand the integrity of messages of media to be useful to and encourage people to practice medical advises.

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*Abbreviations:*

*AMI: acute myocardial infarction*

*CMCI: Chinese Medical Citation Index*

*PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-analyses*

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