

Knowledge, attitude and practice toward COVID-19, 2020 in Kassala, Sudan

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Abstract:

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. The behavior of the general public will probably have an important bearing on the course of the coronavirus disease 2019 (COVID-19) epidemic. Human behavior is influenced by people's knowledge and perceptions. This study was done to assess the knowledge, attitude and practice of the people in the state of Kassala.

A cross-sectional descriptive survey of 210 Sudanese residents from the state of kassala was conducted between March –May 2020. 210 questionnaires were distributed, Data collected were analyzed using descriptive statistics, analysis for frequencies and chi-square was obtained using R Language Version R i386 4.0.2. 96.2 % of our respondents heard about corona (p-value < 2.2e-16), while the main source of information was through the radio 34.3 % (p-value = 5.515e-15). 83.3 % of the respondents think they are at risk of exposure to COVID -19, 97.6% think that it's important to take measures to prevent corona virus in the community. Most of our respondents (94.35) think that corona causes stigma to the affected people. 61.9% of our participants think the virus is very dangerous. In the effort to prevent the spread of the disease, 28.6% the respondents stopped greeting people while 28 % of them did not take any measures to stop it. There is poor knowledge, attitude and practice to wards corona in the state of kassala.

The ministry of health needs to intensify the effort to provide knowledge through radio, as it was the most commonly used media in our community.

Key words: corona; knowledge; attitude; practice

Introduction:

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus [1]. Coronavirus is a type of virus. There are many different kinds, and some cause disease. A newly identified coronavirus, SARS-CoV-2, has caused a worldwide pandemic of respiratory illness, called COVID-19 [2]. **The virus that causes COVID-19 is spreading very easily and sustainably between people.** Information from the ongoing COVID-19 pandemic suggests that this virus is spreading more efficiently than influenza, but not as efficiently as measles, which is highly contagious. In general, **the more closely a person interacts with others and the longer that interaction, the higher the risk of COVID-19 spread. Touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes. The risk of COVID-19 spreading from animals to people** is considered to be low [3]. The behavior of the general public will

probably have an important bearing on the course of the coronavirus disease 2019 (COVID-19) epidemic. Human behavior is influenced by people's knowledge and perceptions. Several important misconceptions on how to prevent acquisition of COVID-19, including beliefs in falsehoods that have circulated on social media. A substantial proportion of participants also expressed an intent to discriminate against individuals of East Asian ethnicity for fear of acquiring COVID-19 [4].

Whether this pandemic ultimately causes tens or hundreds of thousands of deaths remains to be seen. Even so, vigilance and knowledge are the order of the day. Knowledge is power, and our individual and collective ability to deliver information is one of our greatest tasks [5].

This study was done to assess the knowledge, attitude and practice of the people in the state of kassala.

Materials and Methods:

Study Design

A cross-sectional descriptive survey of 210 Sudanese residents from the state of kassala was conducted between March –May 2020.

Study area.

The study was carried out in Kassala Town (Latitude: 15° 27' 3.56" N Longitude: 36° 23' 59.93" E). Kassala state is bordered by Eritrea from the east, Red Sea and River Nile States from the north, Gezira State from the west and AlGaderef State from the south. Kassala state has a total population of 1.5 million (4.6% of total Sudan population) about 20 % (300,000) of them live in Kassala town, the state capital. Kassala is about 650 kilometers from Khartoum. Temperatures do not vary greatly with the season. Throughout the year, it is generally hot with a brief mild winter period between December and February. The heat can reach 45-50 Celsius at times, especially between March and June. Rainy season starts in July and ends in September/October [6].

Data collection

This study was based on a questionnaire designed by the World Health Organization and UNICEF. 210 Questionnaires were distributed in tow locality in Kassala state, Garb Kassala and Rifee Kassala.

Ethical approval

The ethical approval has been obtained from research board at Kassala University.

Statistical Analysis

Data was entered into computer data base, R Language Version R i386 4.0.2 was used to obtain chi-square analysis.

Results

Socio-demographic characteristics	Response	No.	%
Sex	Male	55	26.2
	Female	155	73.8
Total		210	100.0
Age	≤ 18	24	11.4
	19-30	133	63.3
	31-40	31	14.8
	>40	22	10.5
Total		210	100.0
Mean age (Mean± SE)	29.5±.5		
Occupation	Driver	17	8.1
	Housewife	126	60.0
	Employee	20	9.5
	Daily labor	35	16.7
	Not work	8	3.8
	Student	4	1.9
Total		210	100.0
Education level	Illiterate	46	21.9
	Khalwa	19	9.0
	Basic/primary	115	54.8
	Secondary	26	12.4
	University	4	1.9
Total		210	100.0

Table1: Socio-demographic characteristics of the respondents (n=210):

The total number of respondents is 210, 55 males and 155 females. The mean age of the respondents is 29.5. 60 % of our female population are housewives. Most of the respondents were with basic or primary education. (Table 1).

Knowledge

96.2 % of our respondents heard about corona (p-value < 2.2 e-16). The major source of information was through the radio 34.3 % (p-value = 5.515e-15). (Figure 1)

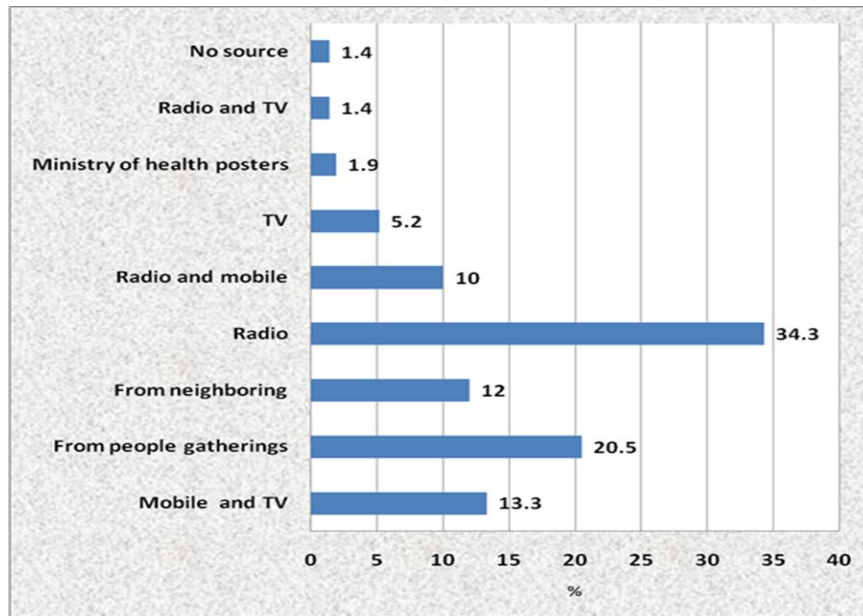


Figure1: Source of information of the respondents (n=210)

30% of our respondents stated that corona virus causes fever and cough while 20 % didn't know about it. (figure2)

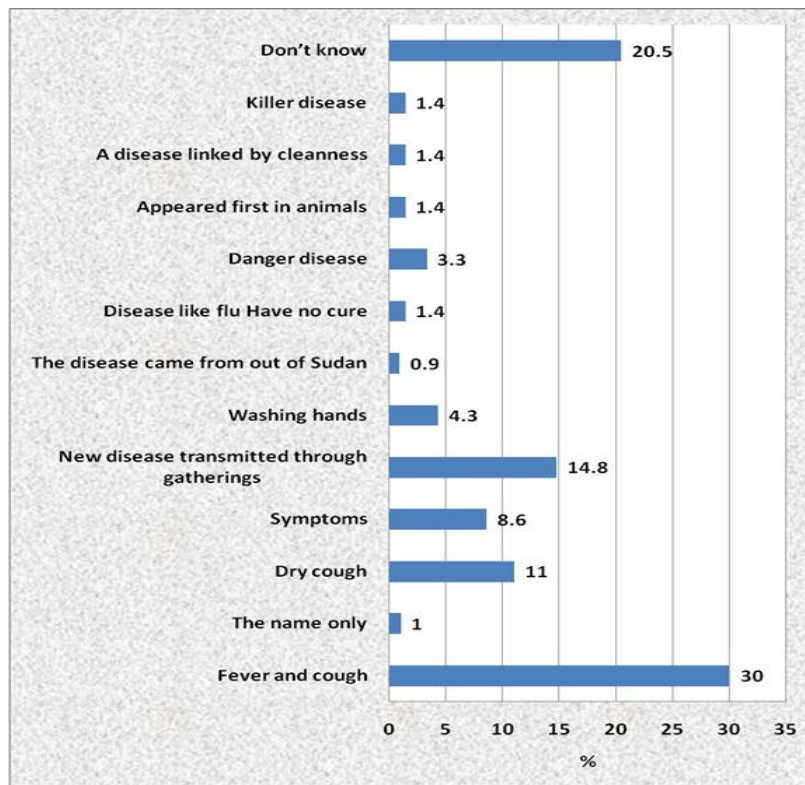


Figure 2: General knowledge about Corona Virus of the respondents (n=210)

Attitude

Question	Frequency (N, %)		
	Do you think you are exposed to the risk of infection by new Corona virus?	Yes 175(83.3%)	No 33(15.7%)

Do you think it is important to take measures to prevent Corona virus in the community?	Yes 205(97.6%)	No 3(1.4%)	I don't know 2(1%)		
Do you think Corona virus disease causes stigma against certain people?	Yes 198(94.3%)	No 12(5.7%)	I don't know 0%		
How dangerous is the new Corona virus in your opinion?	Don't know 3(1.4%)	Killer 52(24.8%)	Very dangerous 130(61.9%)	Dangerous 24(11.4%)	Not dangerous 1(0.5%)

Table2: Attitude to COVID-19 of the respondents (n=210)

83.3 % of the respondents think they are at risk of exposure to COVID -19, 97.6% think that it's important to take measures to prevent corona virus in the community. Most of our respondents (94.35 %) think that corona causes stigma to the affected people. 61.9% of our participants think the virus is very dangerous as table 2.

Practice

In figure 3 demonstrate the effort to prevent the spread of the disease, 28.6% the respondents stopped greeting people while 28 % of them did not take any measures to stop it.

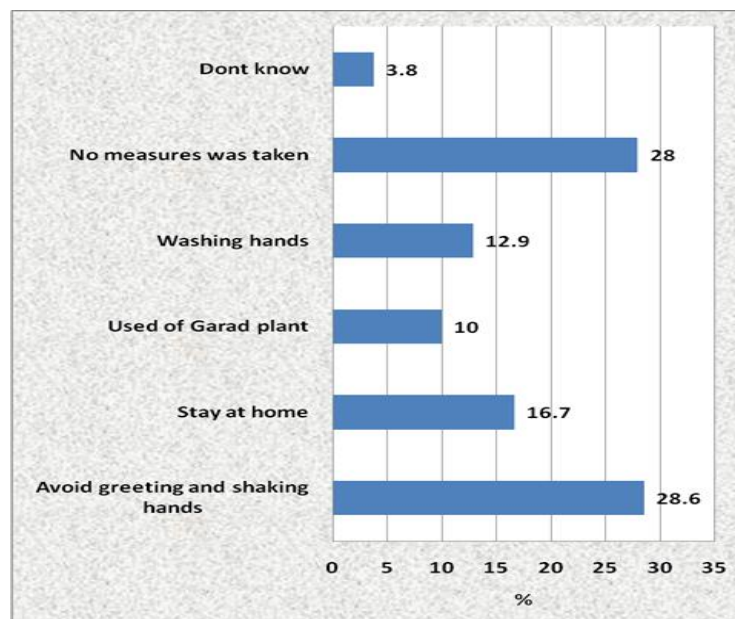


Figure 3: Practice to COVID-19 of the respondents (n=210)

Discussion

In our study the source of information was through the radio 34.3 % (p-value = 5.515e-15) which is disagree a study done in Nigeria [7], Egypt [8] and Ghana [9]. Where the social media was the most common source of information, this is may be due to better infrastructure. 61.9% of our participants think the virus is very dangerous disagree a study done in Jordan where the respondents think its moderately dangerous [10], and a study done in Ghana where 85% of the study population perceived COVID-19 as dangerous disease [9].

Most of our respondents (94.35%) think that corona causes stigma to the affected people. This agree with the study done in the United States and United Kingdom where the general public showed discrimination against East Asian communities [4]. 83.3 % of the respondents think they are at risk of exposure to COVID -19, this agree to study done in Ethiopia where 80 % say the level of risk of infection with COVID - 19 is high [11]. 97.6% think that it's important to take measures to prevent corona virus in the community, this is consistent with a study conducted in China [12] and another study in Saudi Arabia [13]. 28.6% of our respondents stopped greeting people while 28 % of them did not take any measures to stop the

spread of the disease. The poor practice agrees to a study done in Ethiopia [11].

The level of practice is low compared to study done in Saudi Arabia [13] may be because of better awareness and Pakistan [14], this might be because the study done in Pakistan is among health care workers.

Conclusion and recommendations

The area chosen because it is close to the Ethiopian-Sudanese border and has a large number of refugees. There is poor knowledge, attitude and practice towards corona in the state of Kassala. This may be due to most of participates from rural area and there have no media to receive the awareness messages. The Ministry of Health needs to intensify efforts to provide knowledge through radio, as it was one of the most used media in this region.

Future studies should be conducted and circulated in all areas of Kassala state, especially that there is a high rate of stigma towards COVID-19 in Kassala.

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