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ASSESSMENT OF ATTITUDE AND PREVENTIVE PRACTICE OF CORONAVIRUS (COVID-19) AMONG COMMUNI-TIES; THE CASE OF KAFFA ZONE SOUTHWESTERN EYHIOPIA.

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# ABSTRACT

The pandemic corona virus sickness has a tremendous psychological, social, and moral impact on individuals. People who come into touch with the corona virus may not realize they are infected, and the carrier can transfer the virus during the incubation period. In relation to this, the community's attitude toward coronavirus prevention was evaluated. As a result, the goal of this study was to look into community attitudes and preventive practices in the Kaffa zone. A cross-sectional survey with 400 participants was undertaken. The study participants were chosen using a simple random sample procedure, specifically the lottery method. A questionnaire was used to collect data. Data entry and analysis were completed using SPSS version 26 after the data was gathered. As a result, simple descriptive statistics were used to compute the acquired data.

In terms of community attitudes, 61% of respondents are aware that covid-19 is transmitted from victim to victim by hand shaking and close contact. As a result, 37.8% of participants were aware that health organization service centers were responsible for creating awareness, but thought the information provided was insufficient. Furthermore, the findings of this study demonstrated that the community's opinion about each feature of COVID-19 was positive among the study participants. Communities, on the other hand, are still not fully paying attention.

# **KeyWords**

Attitude, Communities, Corona Virus and Preventive practice

#### 1. Introduction

COVID-19 is spread from person to person through droplets emitted when an infected individual sneezes and direct contact, with a 4-14-day incubation period (CDC: (2020). The elderly and patients with chronic medical illnesses such as diabetes and cardiovascular disease are at a higher risk of developing a serious infection. Fever, dry cough, dyspnea, myalgia, weariness, hypolymphaemia, and radiographic indications of pneumonia are

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the most common symptoms of COVID-19. Complications (e.g., acute respiratory distress syndrome [ARDS], arrhythmia, shock, acute cardiac injury, secondary infection, and acute kidney injury) and death may occur in severe cases Lei, S., Jiang, F., Su, W., Chen, C., Chen, J., Mei, W., Zhan, L. Y., Jia, Y., Zhang, L., Liu, D., Xia, Z. Y., & Xia, Z. (2020). Presently, no antiviral therapy or vaccine is explicitly recommended for COVID-19 and implementation of preventive measures to control COVID-19 is the mainstay critical intervention. Bhagavathula AS, Aldhaleei WA, Rahmani J, Mahabadi MA, Bandari DK. (2020).

COVID-19 was first recorded in Africa on February 14, 2020, with the first confirmed case in Egypt and the first in Sub-Saharan Africa in Nigeria. The first case in Ethiopia was reported on March 13, 2020, and the disease quickly spread to practically all regional states and zones. In response to this, Ethiopia's Ministry of Health has declared a state of emergency to prevent the spread of COVID-19. Nonetheless, communities in the specified study region go about their daily lives as they did before COVID-19, and they go about their business formally, forgetting about the epidemic and the stated lockdown; this is the situation.

Coronaviruses belong to the genus Coronavirus in the Coronaviridae. All CoVs are polymorphic RNA viruses characteristically containing crown-shape peplomers with 80-160 nm. in size and 27-32 kb positive polarity. Recombination rates of CoVs are very high because of constantly developing transcription errors and RNA Dependent RNA Polymerase (RdRP) jumps. With its high mutation rate, Coronaviruses are zoonotic pathogens that are present in humans and various animals with a wide range of clinical features from asymptomatic course to requirement of hospitalization in the intensive care unit; causing infections in respiratory, gastrointestinal, hepatic and neurologic systems (Woo PC *et.al.*,2010; Drexler JF, *et.al.*,2010).

They were not considered as highly pathogenic for humans until they have been seen with the severe acute respiratory syndrome (SARS) in the Guangdong state of China for the first time in 2002 and 2003. Before these outbreaks, there were the two most known types of CoV as CoV OC43 and CoV 229E that have mostly caused mild infections in people with an adequate immune system (Peiris JSM, Lai ST, Poon L, *et al.*, 2003) Approximately ten years after SARS this time, another highly pathogenic CoV, Middle East Respiratory Syndrome Coronavirus (MERS-CoV) has emerged in the Middle East countries (Zaki AM, *et al.*, 2012).

Many efforts have been made by the government of the country and the ministry of health in order to prevent the spread of the disease. Contagious transmission route of the disease made the Universities and schools to be closed; private worker and government employees were assigned to stay at home; transportation was stopped for shorter period and re allowed to work with 50% capacity. Marketing areas were redistributed; Universities and large hall, including Coronaviruses are members of the Coronaviridae family and belong to the genus Coronavirus. All CoVs are polymorphic RNA viruses with crown-shape peplomers that are 80-160 nM in size and have a positive polarity of 27-32 kb. Because of constantly growing transcription mistakes and RNA Dependent RNA Polymerase (RdRP) leaps, CoV recombination rates are extremely high. Coronaviruses are zoonotic pathogens

that are found in humans and many animals, causing infections in the respiratory, gastrointestinal, hepatic, and neurologic systems (Woo PC et al., 2010; D'Agostino et al.

Pharmacists play a critical role in the fight against pandemics as part of the healthcare workforce. Pharmacists' responsibilities in the case of COVID-19 include raising public awareness about the virus, manufacturing, distributing, and supplying essential preventive items such as hand sanitizers and personal protective equipment, and participating in research to find vaccines and drugs to combat the virus. (E. Mullen, G. H. Smith, and A. N. M. Irwin, 2003).

As a result, pharmacists must be well-versed in COVID-19 in order to effectively carry out their duties in the fight against the disease. It is critical to assess the knowledge, attitude, and practice of healthcare personnel who are involved in the outbreak response in Ethiopia in order to support an immediate reaction to a potential COVID-19 outbreak. The goal of this study was to investigate COVID-19-related attitudes and practices among Kaffa zone residents in southwestern Ethiopia. As a result, there are numerous opportunities for the COVID-19 disease to spread into the Kaffa zone, including social interaction among the people; daily transportation from the country's central region, Addis Ababa, to the Kaffa zone; and the fact that the Kaffa zone is surrounded by other neighboring regions and zones. On the other hand, the prevalence of attitudes about the disease and the efficiency of preventive practices are unknown. As a result, several studies on the innovative Covid-19 have been undertaken that include a variety of characteristics; for example, Zelalem T, Malede, Y, Zenebe N, and Akeberegn A, 2020 and Muhammad S et.al., 2020 focused solely on health professionals, whereas our study emphasizes particularly. As a result, these and other studies did not consider the community's attitude and prevention practices. As a result, the current study aims to analyze the current state of COVID-19 attitudes and prevention measures among communities in the Kaffa zone, considering this gap, the purpose of this research was to find answers to the research questions listed below.

- $\Psi$  What is the attitude of peoples toward covid-19?
- $\Psi$  What is the extent of corona virus preventive practices that were utilized in the study area?

#### 2. Methodology

The research was carried out in the Kaffa zone of Ethiopia's southwestern Ethiopia, nationalities, and people regional state in the southwest. Bonga, the zone's capital, is located 449 kilometers southwest of Ethiopia's capital, Addis Ababa. The research area's name, "Kaffa," is well-known and on the thoughts of many people throughout the world who enjoy the juice derived from the berry of a plant that originated in Kaffa, cof-

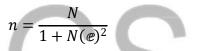
3.

Result

fee. Kaffa zone is bordered on the north by Oromia region, on the east by Semen Omo zone, on the south east by Debub Omo zone, on the south and southwest by Bench Maji zone, and on the west by Shaka zone. Chena, Bitta, Gesha, Decha, De Decha, Decha, Decha, Goba, Cheta, Gawata, Menjiyo, Saylem, Shishinda, Tello, and two administrations.

The study design for this study was cross-sectional survey design. This is preferred because the means that the researcher use to obtain data from participants was questionnaire A cross-sectional survey design was used for this investigation. This is favored because the researcher used a questionnaire and observation to collect data from participants at the same time in order to explore corona virus awareness, attitudes, and prevention practices (covid-19). The case of the Kaffa zone in southwestern Ethiopia, among communities. that was administered at one time to investigate the attitude and preventive practice of corona virus (covid-19). Among communities; the case of Kaffa zone, southwestern Ethiopia.

Yamane (1967) was used to calculate sample sizes, and n= 400. This formula was used to calculate the sample sizes at the 95% confidence level and, e is the desired level of precision 0.05, total population N = 874,716 based on 2007 CSA data.



Two city administrations (Bonga and Chena town) were eligible for participation in this survey due to substantial traffic movements, and three woredas (Gimbo, Saylem, and Addiyo) were eligible due to the possibility of patient or disease entry. Following the selection of woredas and the participation of two kebeles from each woreda and the town administration, around 40 respondents were eligible for the lottery process.

Data entry and analysis were completed using SPSS version 26 after the data was gathered. As a result, simple descriptive statistics were used to compute data collected through a questionnaire and observation.

Table 1 Socio- Demog	raphic Characteristics of	f the Respo	ondents, (N=	=400)	
Variables	Categories	Male	Female	Total	Percent
Sex	Male/Female	296	104	400	100
Age	< 30	75	31	106	27
	31-45	161	49	210	52.5
	46-60	49	20	69	17.25
	$60^{+}$	11	4	15	3.75
Educational status	1-8	35	19	54	13.5
	9-12	52	29	81	20.25
	12+	167	39	206	51.5
	Illiterate	42	17	59	14.75
Work	Private	94	48	142	35.5
	Gov.t employee	202	56	258	64.5

Religion	Orthodox	123	28	151	37.75
	Muslim	54	22	76	19
	Catholic	20	15	35	8.75
	Protestant	88	31	119	29.75
	Others	11	8	19	4.75
Marital Status	Married	186	68	254	63.5
	Single	110	36	146	36.5

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The objective of this study was to investigate the awareness and preventive practice of community. Hence, the total number of the distributed questionnaires was 400 and all questionnaires were filled completely and consistently with a response rate of 100%. Among the total respondents who filled the questionnaire, 296 (67.58%) were males and the rest 104 (32.41%) were females. The majority of respondents' age was on at the intervals of 31-45. As observed from the above table majority of respondents 206 (51.5%) were above grade, 12<sup>th</sup>, hence, 258 (64.5%) of participants were government employee, 151 (37.75%) of respondents were orthodox religion followers and finally 254 (63.5%) of the respondents were married in their marital status.

Table. 2. Activities to be done if symptoms of corona virus are displayed

Variable	Frequency	Percent (%)
Reporting for health officers	260	65
As any disease treated in the home in the usual w	way 48	12
Isolation of bed, eating and drinking equipment	65	16.3
I do not know what I shall do	27	6.8
Total	400	100

The participants are asked if the symptoms of the corona are visible on themselves or their coworkers, as shown in the table above. This participant's response was as follows: As a result, 262 (65%) of participants said that if corona virus symptoms are present, they should contact health officials, while 48 (12%) said that they should treat it at home as they would any other ailment. On the other hand, 65 (6.3 percent) of respondents said they isolate bed, eating, and drinking equipment from those who are exhibiting symptoms. While 27.8% of responders said they have no idea what they should do.

Items	Frequency	Percent
Fear	104	26.0
feeling of care	270	67.5
I don't have any feeling	26	6.5

Table 3. Reaction of feeling whenever you hear about coronavirus (covid-19)

The above table depicts how communities react when they hear about coronavirus(covid-19); thus, 104 (26%) of participants in this study responded as fearful, 270 (67.5%) of participants responded as caring, and 26 (6.5%) of participants responded as having no feelings about coronavirus when they hear.

Variable	Frequency	Percent	
Strongly Disagree	52	13	
Disagree	16	4	
Undecided	75	18.8	
Agree	78	19.5	
Strongly Agree	179	44.8	
Total	400	100	

Table. 4 Fear of Corona virus disease

The preceding table depicted the frequency and proportion of individuals who were afraid about the corona virus sickness. And, in this regard, 179 (44.8%) of participants strongly agree that they are afraid of the Corona virus and that it would impair their health; 78 (19.5%) of participants agreed and are afraid of the pandemic sickness; and 75 (18.8%) of participants did not decide and responded as undecided. However, 52 (13%) of participants strongly disagreed that they did not dread the corona virus, and 16 (4%) of individuals disagreed that they did not fear the corona virus; because coronavirus is a disease like other viral diseases, and it may not affect them if they are not exposed to it.

Variable	Frequency	Percent	
Strongly Disagree	10	2.5	
Disagree	17	4.3	
Undecided	42	10.5	
Agree	89	22.3	
Strongly Agree	242	60.5	
Total	400	100	

 Table 5. Confidence that Corona virus disease transmit from victim to healthy one during sneezing and coughing

Participants' attitudes were evaluated in terms of their confidence, as seen in the table above. As a result, 242 (60.5%) of respondents believe the corona virus sickness is transmitted from a victim/positive to a healthy person through sneezing and coughing. In relation to these, 89 participants (22.3%) agreed and were confident that Coronavirus sickness is transmitted from victim to healthy person through sneezing and coughing. Surprisingly, 10 (2.5 percent), 17 (4.3 percent), and 10 (2.5 percent) of respondents said they did not have faith in the corona virus sickness, which is transmitted from a victim to a healthy person through sneezing.

Variable	Frequency	Percent	
strongly disagree	103	25.8	
disagree	14	3.5	
undecided	71	17.8	
agree	65	16.3	
strongly agree	147	36.8	
Total	400	100.0	

Table 6. The Corona virus disease is curse of God

As shown in the table above, participants believe the corona virus is an illness that is a curse of God; 147 (36.8%) of participants strongly agree that the corona virus is a profanation of God, while 65 (16.3%) of respondents agree that the corona virus disease is a curse of God. Contrary to popular belief, 103 (25.8%) and 14 (5%), respectively, of respondents said they strongly disagree and disagree. As a result, corona virus sickness is not a divine curse; it is caused by humans rather than God. Despite this, 71 (17.8%) of participants said they didn't know whether coronavirus sickness is a God's curse or not.

Table 7. Corona virus didn't transmit through contact

Variable	Frequency	Percent	
Strongly disagree	184	46.0	
Disagree	23	5.8	
Undecided	63	15.8	
Agree	48	12.0	
Strongly agree	82	20.5	
Total	400	100.0	

According to the above table, participants' attitudes are examined, and 184 (46%) and 23 (5.8%) of participants said that they strongly disagree and disagree with the statement that corona virus does not spread through contact with others. They believe that corona virus is transmitted by contact with people, among other things. Contrary to popular belief, 48 (12%) and 82 (20.5%) individuals said they agree and strongly agree, respectively, that the corona virus does not spread through contact. Finally, 63 (15.8%) of participants said they were confident that the corona virus sickness did not spread through touch.

Table 8. Believe that Corona virus disease never attack individuals who do not have other health problems

 nave other ne	utili problems		
Variable	Frequency	Percent	
strongly disagree	184	46.0	
dis agree	28	7.0	
undecided	75	18.8	
agree	49	12.3	

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strongly agree	62	15.5	
Total	400	100.0	

As shown in table 5, participants' attitudes were analyzed; as a result, 184 participants (46%) and 28 (7%) of respondents said they strongly disagree and disagree with the belief that corona virus disease never targets people who do not have other health problems, respectively. However, 62 (15.5 %) and 49 (12.3 percent) highly agree and agree that corona virus sickness never affects people who do not have any other health problems. 75 % of respondents, or 18.8%, said they were undecided because they believe or don't believe that the corona virus sickness never strikes people who don't have other hepatitis viruses.

Table 9. Trusting that using alcohol and sanitizer cannot protection Corona virus

Frequency	Percentage	
149	37.3	
35	8.8	
97	24.3	
60	15.0	1
57	14.3	
400	100.0	
	149 35 97 60 57	149     37.3       35     8.8       97     24.3       60     15.0       57     14.3

On staying at home and hand shaking as preventive strategies for corona virus disease, 149 (37.3 %) agreed; 35 (8.8%) disagreed; 97 (24.3 percent) were undecided; 60 (15 percent) agreed; 57 (14.3 percent) highly agreed. People in the study area believe that alcohol and sanitizer are effective preventative agents that reduce the effects of the covid-19 or corona virus sickness.

Table 10. Corona virus disease protection is only by strong belief

Item	Frequency	Percent	
Strongly disagree	146	36.5	
Disagree	28	7.0	
Undecided	86	21.5	
Agree	55	13.8	
strongly agree	85	21.3	
Total	400	100.0	

Strongly disagree: 146 (36.5%). 86 (21.5%) are undecided, whereas 28 (7%) do not associate corona virus sickness with belief. People in the study area believe that preventative measures are useful for corona virus disease, as 55 (13.8%) agree; 85 (21.3 percent) highly agree.

Item	Frequency	Percent	
Strongly disagree	44	11.0	
Dis agree	27	6.8	
Undecided	36	9.0	
Agree	61	15.3	
Strongly agree	232	58.0	
Total	400	100.0	

Table 11. The need of using masks at market and religious areas

The use of a mask is not an effective preventive strategy of the covid-19 in the vicinity, according to 232 (58%) of the respondents. 27 people (6.8%) disagree; 36 (9%); 61 (15.3%) agree; 44 (11%) strongly disagree, indicating that they have a favorable attitude toward mask use. This could be due to cultural differences, or they may assume that merely washing with soup and water, or using alcohol and sanitizer, is a viable preventative method.

Table 12. Nothing can protect Corona virus disease

Item	Frequency	Percent	
Strongly disagree	196	49.0	
Dis agree	43	10.8	
Undecided	66	16.5	
Agree	39	9.8	
Strongly agree	56	14.0	
Total	400	100.0	

The majority of responders (196%) believe that covid-19 illness can be prevented by following preventive guidelines established by health organizations. 43 (10.8 %) disagree; 66 (9.8%) respondents are undecided; 39 (9.8%) agree; and 56 (14%) strongly agree that corona virus sickness may be prevented.



# Fig 3. Hand washing preferability

According to the chart, the majority of respondents (74%) wash their hands with soup and water when at home; 43% wash when they leave and return home; and the remaining 39% wash whenever soup and water are available.

# 4. Discussion

The federal and regional governments, as well as other concerned authorities, are entrusted with informing the public about what is going on in their neighborhoods, states, countries, continents, and the entire world, particularly in this era of the COVID-19 epidemic. The prevalence of Good Knowledge was discovered via news media, social media, WHO, and CDC Websites, according to a study by (Ayanaw et al., 2020). Coronavirus disease (COVID-19) is an infectious disease caused by a recently discovered coronavirus. (Ayanaw and et al., 2020).

According to the preceding discussion paragraph, barely 25% of the community has enough knowledge about preventing and managing the spread of the COVID-19 virus, its symptoms, transmission routes, and potential therapies. Similarly, a sizable percentage of responders (51.5%) stated that they are well informed about the coronavirus condition (COVID-19). As a result, a bigger group of community members will be obtaining the necessary information to protect themselves against the corona virus and to stop the infection's spread. According to the research, approximately 75 % still require daily updates and knowledge without sensitivity.

According to the United Nations Coordinated Appeal (2020), humanitarian needs must be understood in the context of constrained access to people and the need for real-time information in a rapidly evolving emergency, including the use of technology that facilitates and accelerates data collection in a context of constrained access to people and the need for real-time information in a fast-evolving emergency. At the same time, this research shows that COVID-19 has a greater impact on morbidity and mortality in specific vulnerable groups, such as the elderly, chronically ill, immunologically compromised, and people with disabilities, and that its spread is linked to the virus's rapid circulation in the general population. This research was conducted in rural areas.

In the current study, all of the participants were aware of the corona virus sickness, indicating that they were well-informed. However, the small number of participants guarantees that awareness is raised regularly. On the other hand, the majority of the responses imply that awareness-raising activities were uncommon. If not done on a daily basis, this infrequent generation of awareness may cause evasion among the population and create conditions conducive to virus transmission. The study (Priya and Sherkhane, 2020) conducted in India confirms that organizing frequent webinars for educational intervention should be considered, as it might be a valuable and safe tool to reach

Our findings are congruent with Zelalem T, Malede Y, Zenebe N, Akeberegn A, 2020, who found that state communities had a positive attitude toward COVID-19 prevention. In our study, however, 44.8 percent of individuals said they were afraid about coronavirus. It's because no one is certain that they fully comprehend and know how COVID-19 spreads. Furthermore, because they are aware of various ways, communities have the knowledge, attitude, and trust that Corona virus sickness spreads from victim to healthy person during sneezing and coughing.

This study demonstrates that the study region has a positive attitude toward corona virus prevention by washing hands with soup and water, as the majority of 154 (38.5 percent) of respondents agree, with the remaining 88 (22%) population uncertain. As a result of the current pandemic, WHO has produced various guidelines as well as begun online courses and training sessions to enhance knowledge and preparedness regarding CO-VID-19 prevention and control among HCPs [citation in Muhammad Saqlain et al.,2020]. As a result, it is strongly recommended that the local population's positive attitude toward the corona virus be strengthened. In general, this finding suggests that the majority of community people in the area have no personal hygiene-related disease preventive attitudes. People in the study area believe that staying at home and avoiding hand-shakes are preventive practices for covid-19 viral disease, which is consistent with WHO's preventive guide-lines from 2020; however, 81 (20.3%) respondents were undecided about whether staying at home and avoiding handshakes are preventive practices. The former may be due to social and religious reasons, such as believing that handshake is a spiritual imperative, while the latter may be due to sociocultural and religious reasons.

#### Conclusion

The results of this study demonstrated that the community's opinion about each feature of COVID-19 is positive among the study participants. Only a few members of the community, however, had a positive attitude

toward the COVID-19 condition. Only enough information regarding preventing and regulating the spread of the COVID-19 virus, its symptoms, modes of transmission, and potential therapies was gathered by the community. Ethiopia's Ministry of Health is working to raise community awareness about the unique virus by sending text messages and using various forms of communication, such as television and social media.

This study demonstrates that the study area has a positive attitude toward corona virus prevention through hand washing with soup and water. Some people believe that wearing a face mask by itself causes cases, respiratory health problems, or a personal feeling that COVID-19 is a curse and that they are unable to quit wearing it. The majority of respondents (196/49%) believe that covid-19 illness can be prevented by following or following preventive guidelines established by health organizations.

According to the findings of this study, communities should wash their hands more frequently to prevent covid-19.

#### **Recommendations**

Some of the participants lacked the necessary attitude and preventative behaviors to protect themselves, their families, their communities, and the globe from the COVID-19 sickness. As a result, the Kaffa zone government should work in tandem with Kaffa zone health institutions to raise community knowledge and promote community attitudes for practicing COVID-19 prevention. Furthermore, the community only learned enough about how to avoid and manage the spread of the COVID-19 virus, its symptoms, transmission routes, and accessible therapies.

Another aspect we advise to the Kaffa Zone Health Organization is that communities are still not fully aware of the COVID 19 crisis. For example, the style of face mask wearing is inappropriate, and despite the fact that communities despise wearing face masks, some people do not properly wash their hands for 20 seconds with soap. For this reason, the concerned bodies should enable, communities to wash their hands more frequently to prevent covid-19. As a result, if we do not focus on how to avoid COVID-19, the majority of the community will be infected with coronavirus disease. As a result, all involved bodies should work to increase community attitude of the need to adhere to all COVID-19 prevention strategies that the WHO has declared. Some people believe that wearing a face mask alone creates respiratory issues, or that COVID-19-19 is a curse that cannot be reversed by wearing a face mask.

# Acknowledgment

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# **Competing interests**

The authors have stated that they have no competing interests. **References** 

Ayanaw, B., Id, K., Adane, A., Tilahun, Y. T., Kassahun, A., Ayele, A. S., & Belew, A. K. (2020). Knowledge and attitude towards COVID-19 and associated factors among health care providers in Northwest Ethiopia. 408, 1–12. https://doi.org/10.1371/journal.pone.0238415

- Bhagavathula AS, Aldhaleei WA, Rahmani J, Mahabadi MA, Bandari DK. Novel Coronavirus (COVID-19) Knowledge and Perceptions: A Survey on Healthcare workers. MedRxiv 2020:2020.03.09.20033381. https://doi.org/10.1101/2020.03.09.20033381
- CDC: (2020). Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease (COVID-19) in Healthcare Settings.
- Lei, S., Jiang, F., Su, W., Chen, C., Chen, J., Mei, W., Zhan, L. Y., Jia, Y., Zhang, L., Liu, D., Xia, Z. Y., & Xia, Z. (2020). Clinical characteristics and outcomes of patients undergoing surgeries during the incubation period of COVID-19 infection. *EClinicalMedicine*, 21, 100331. https://doi.org/10.1016/j.eclinm.2020.100331
- Muhammad Saqlain, Muhammad Muddasir Munir, Saif-Ur-Rehman, M.Phil,Pharm-D Azhar Hussain Tahir, Quaid-I-Azam,Muhammad Mashhood, M.Phil, 2020; Knowledge, Attitude and Practice among Healthcare Professionals regarding COVID-19: A cross-sectional survey from Pakistan Running title: KAP regarding COVID-19.
- Mullen, E, Smith GH, Irwin AN, Angeles M. Pandemic H1n1 influenza virus: academy perspectives on pharmacy's critical role in treatment, prevention. J Am Pharm Assoc (2003). 2009;49(6):728. doi:10.1331/JAPhA.2009.09539 [PubMed] [CrossRef] [Google Scholar].
- Peiris JS, Lai ST, Poon LL, Guan Y, Yam LY, Lim W, Nicholls J, Yee WK, Yan WW, Cheung MT, Cheng VC, Chan KH, Tsang DN, Yung RW, Ng TK, Yuen KY; SARS study group. Coronavirus as a possible cause of severe acute respiratory syndrome. Lancet. 2003 Apr 19; 361(9366):1319-25. doi: 10.1016/s0140-6736(03)13077-2. PMID: 12711465; PMCID: PMC7112372.
- World Health Organization 2020. Preparedness, prevention and control of COVID-19 in prisons and other places of detention [Internet]. Geneva; 2020. <u>http://www.euro.who.int/\_\_data/assets/pdf\_file/0019/434026/Preparedness-\_prevention\_and-\_</u> control-of-COVID-19-in-prisons.
- Woo PC, Huang Y, Lau SK, Yuen KY (2010). Coronavirus genomics and Bioinformatics analysis. Viruses; 2:1804–20.
- Yamane, Taro. 1967. Statistics, An Introductory Analysis, 2nd Ed., New York: Harper and Row.
- Zaki AM, van Boheemen S, Bestebroer TM, Osterhaus AD, Fouchier RA. Isolation of a novel coronavirus from a man with pneumonia in Saudi Arabia. N Engl J Med 2012; 367:1814–20.
- Zelalem T, Malede Y, Zenebe N, Akeberegn A, (2020), COVID-19-Related Knowledge, Attitude and Practice Among Hospital and Community, Dove Press journal: