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 - (c) Disseminating information on nursing related development that are not usually easily available to academics and practitioners.
3. The Journal will accordingly encourage the publication of the following categories of papers.
 - (a) Research papers that move away from orthodoxy and which really break new grounds in terms of methodology and findings.
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 - (c) Documents emanating from national and international conferences, as well as from largescale research work that emerging trends and thinking in nursing related development.
4. LJN is published biannually in any area of nursing interest or relevant to needs of academics and practitioners.

In this volume, sixteen (16) manuscripts scale through the eye of the needle of the Editor-in Chief. The title of the papers in this edition are: Evaluation of Nurses' Actions and Opinion on Pain Assessment of Hospitalised Patients; Ultraviolet Radiation on Gunshot Wounds: Clinical Case Reports; Assessment of Knowledge and Compliance with Coronavirus Protocols Among Healthcare Professionals; Availability of Essential Components of Maternal Healthcare in Health Institutions; Factors Associated with Overweight and Obesity among Adolescents; Health-Seeking Behaviours, of Women Presenting with Advanced Stages of Breast Cancer: Sociocultural Beliefs and Practices on Placenta Disposal and Processing among Multiparous Women; Parental Control, Social Media Utilisation And Risky Sexual Behaviour Among Adolescents; Assessment of Nosocomial Infection Preventive Measures Utilized by Clinician Nurses in Intensive Care Unit; Alternative Medicine Use and its Perceived Effectiveness in Management of Hypertension; Assessment of Modern Contraceptives Uptake among Women of Reproductive Age; Community Health Extension Workers and Traditional Birth Attendants' Neonatal Resuscitation Practices of Babies Born with Asphyxia; Midwives' Current Screening Practice of Intimate Partner Violence among Pregnant Women in Northern Nigeria; Assessment of Cancer Patients' Quality of Life; Knowledge, Attitude and Practice of School Health Program among Secondary School Teachers and Traditional Birth Attendants' Knowledge of First-Aid Management and Skills of Selected Labour Emergencies in Ogbomosho, Oyo State, Nigeria: an Intervention Study.

EDITORIAL DESK

Welcome to LAUTECH Journal of Nursing!

LAUTECH Journal of Nursing focuses on but not limited to research findings in the different areas of nursing: Nursing Care, Nursing Education, Medical Surgical Nursing, Maternal and Child Health Nursing, Community Public Health Nursing, and Psychiatric/Mental Nursing. This journal is published to promote quality scholarly writing and hence instigating and generating vibrant discourse in the different areas of nursing. Apart from providing an outlet for publications of research findings, it offers opportunities for professionals and students to disseminate their views or position on topical issues and emerging theories within the scope of the journal. The Journal is peer reviewed by seasoned scholar. Six-three authors have contributed in one way or the other to the tenth edition of the journal.

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ASSESSMENT OF KNOWLEDGE AND COMPLIANCE WITH CORONAVIRUS PROTOCOLS AMONG HEALTHCARE PROFESSIONALS

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ABSTRACT

Coronavirus disease (COVID-19) is an infectious viral disease of the respiratory system, it is believed to be caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). This research was carried out to assess the knowledge and compliance to COVID-19 preventive measures and protocols among healthcare professionals in Ahmadu Bello University Teaching Hospital, Shika-Zaria. A cross-sectional descriptive study was used for the study. A sample size of sixty-three (63) was used for the study. Structured questionnaires were distributed among the respondents. The data were analyzed using a frequency table and a simple percentage. The result of this study indicated that the knowledge level of respondents about COVID-19 preventive measures and protocols was very high with a mean of percentage =76.9, the level of compliance was also very high with a mean of percentage =92.1, and lastly, the barrier to compliance to COVID-19 preventive measures and protocols was the inadequate provision of PPEs. The following recommendations were outlined; the hospital management should be encouraged to make more efforts on the provision of personal protective equipment for healthcare workers to decrease their risk and vulnerability, the hospital management should also be encouraged to make efforts to see that there is regular training and retraining of the healthcare professionals on COVID-19 preventive measures and protocols to sustain their knowledge and compliances.

Keywords: Assessment; Knowledge; Compliance; COVID-19; Protocols.

INTRODUCTION

Coronavirus disease (COVID-19) is an infectious viral disease of the respiratory system believed to be caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Lewis, 2020). Presentations of COVID-19 have ranged from

asymptomatic/mild symptoms to severe illness and mortality. The most common symptoms are fever, cough, and shortness of breath (Chin et al., 2020). Other symptoms such as malaise and respiratory distress have also been unveiled (Morawska and Milton, 2020). Transmission is believed to occur via respiratory droplets from coughing and sneezing, as with other respiratory pathogens, including influenza and rhinovirus (Rabin., 2020). Viruses released in respiratory secretions can infect other individual with mucous membranes. Droplets usually cannot travel more than 6 feet. The virus can also survive on surfaces to varying durations and degrees of infectivity. One study (Spinato *et al.*, 2020) found that SARS-CoV-2 remained detectable for up to 72 hours on some surfaces despite decreasing infectivity over time. Notably, the study reported that no viable SARS-CoV-2 was measured after 4 hours on copper or after 24 hours on cardboard (Spinato *et al.*, 2020).

The disease was first identified in 2019 in Wuhan, the capital of China's Hubei province, and has since spread globally, resulting in the on going 2019–20 coronavirus pandemic. The World Health Organization (WHO) declared the outbreak to be a Public Health Emergency of International Concern on 30 January 2020 and recognized it as a pandemic on 11 March 2020, its first such designation since declaring H1N1 influenza a pandemic in 2009. The illness was recently termed COVID-19 by the WHO, the new acronym derived from "coronavirus disease 2019" The name was chosen to avoid stigmatizing the virus's origins in terms of populations, geography, or animal associations (WHO 2020). On February 11 2020, the Coronavirus Study Group of the International Committee on Taxonomy of Viruses issued a statement announcing an official designation for the novel virus: severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Gorbalenya, 2020).

In the United States, 4,715,540 cases of COVID-19 have been confirmed, as at August 3, 2020, resulting in 155,402 deaths (CDC, 2020). On the following day, the United States declare that it has more confirmed infections than any other country in the world, including China and Italy (Ferguson et al., 2020). Current clusters of increased local transmission can be found throughout Western Europe, the United States, and Iran. The rate of newly reported infections in China has dropped precipitously.

COVID-19-related deaths in China have mostly involved older individuals (> 60 years) and persons with serious underlying health conditions. In the United States, attributable deaths have been most common in adults aged 85 years or older (10%-27%), followed by adults aged 65-84 years (3%-11%), adults aged 55-64 years (1%-3%), and adults aged 20-54 years (< 1%). As of March 16, 2020, no attributable fatalities have been reported in persons aged 19 years or younger (Li et al., 2020). On February 26, 2020, the first case of COVID-19, not associated with travellers from China or known contact with an infected traveller, was reported in California. Community spread of the virus has now been reported in multiple states (CDC, 2020). The Centers for Disease Control and Prevention (CDC) has stated that more cases of COVID-19 are likely to be confirmed in the United States in the near future. Also, they anticipate a widespread SARS-CoV-2 community spread and that most of the US population will be exposed to the virus in coming months, leading to a CDC recommendation against gatherings of 50 persons or more.

In Nigeria, the first case of COVID-19 was confirmed on 27th February 2020 from a 44 year old Italian who arrived at the Murtala Muhammad International Airport, Lagos at 10 pm on 24th February 2020 aboard a Turkish airline from Milan, Italy. He traveled on to his company site in Ogun state on 25th February. On 26th February, he went to the staff clinic in Ogun for a check up, and there was a high index of suspicion by the managing physician. He was referred to IDH Lagos and COVID-19 was confirmed on the 27th of February 2020, and from then till 17th of September 2020, a total of fifty- six thousand seven hundred and thirty-five (56,735) confirmed cases of COVID-19, 48,092 discharges, and 1093 fatalities have been reported (Nigeria Centre for Disease Control (NCDC), 2020).

Multi-sectoral national emergency operations centre (EOC) activated at level 3, continued to coordinate the national response activities. Patients with confirmed cases of COVID-19 infection are isolated at the various isolation centers in the

country and treated according to the standard treatment guidelines provided by World Health Organization and the Nigeria Centre for Disease Control (NCDC) by healthcare providers. The NCDC recommended regular hand washing, use of face mask, maintaining social distancing, use of alcohol hand sanitizer, avoid touching the eye, nose, and mouth with the hands, and covering the mouth while sneezing or coughing. Healthcare professionals spent lots of time with patients in the hospital and with the incidence of this pandemic, the workload tend to increase as patients with COVID-19 require more intense and rapid care. Healthcare professionals are at the front line of the COVID-19 outbreak response and as such are exposed to hazards that put them at very high risk of infection. Hazards include pathogen exposure, long working hours, psychological distress, fatigue, occupational burnout, stigma, and physical and psychological violence.

Several barriers were reported by healthcare professionals regarding the knowledge and compliance to COVID-19 protocols, these include inadequate knowledge of COVID-19, deviations from the recommended PPE donning and doffing protocols despite the WHO recommendations to prevent the transmission of COVID-19 (Birihane et al., 2020). A recent study by Birihane et al., (2020), showed that 90% of observed doffing was incorrect, common errors were doffing gown from the front, removing face shield of the mask, and touching potentially contaminated surfaces and PPE. On COVID-19 compliance, Feyisa, (2021) observed that adherence to the preventive measures of the disease is primarily affected by variables such as knowledge, attitudes, and perception.

Adequate knowledge and strict compliance to measures and protocols set aside by WHO will go a long way in protecting health care workers from contracting the virus and also improve their overall performance, in terms of patient care and work commitment. This justifies the need for the study to assess the level of knowledge and compliance to COVID-19 preventive measures and protocols among healthcare professionals in Ahmadu Bello University Teaching Hospital (ABUTH), Shika, Zaria, Nigeria.

Objectives of the study

1. To determine the level of knowledge of COVID-19 preventive measures and protocols among healthcare professionals in Ahmadu Bello University Teaching Hospital (ABUTH), Shika, Zaria, Nigeria.

2. To assess the compliance level to COVID -19 preventive measures and protocols among healthcare professionals in Ahmadu Bello University Teaching Hospital (ABUTH), Shika, Zaria, Nigeria.
3. To identify the barriers to compliance to COVID -19 preventive measures and protocols among healthcare professionals in Ahmadu Bello University Teaching Hospital (ABUTH), Shika, Zaria- Nigeria.

METHODOLOGY

Design: A quantitative design, using a cross-sectional descriptive approach was employed for the study. It entails the collection of data at a single point in time.

Setting: The setting is Ahmadu Bello University Teaching Hospital (ABUTH), Shika, Zaria- Nigeria. ABUTH, formerly known as the Institute of Health, established in 1968, in accordance with statutes 15 of the university law (amendment act schedule 16) by the former Northern Nigeria government to provide facilities for training of doctors, nurses and other medical personnel. ABUTH Zaria is presently being run by a board, established by decree No. 10 of 1985 and it comprises the chief executive (chief medical director) and the other statutory officers. The hospital offers a wide range of services including medical and surgical services, pharmaceutical services, laboratory services, training, programmes among others. ABUTH also serves as a referral hospital.

Population: All (1,250) the healthcare professionals (Nurses, doctors, pharmacists, and medical laboratory scientists) working in Ahmadu Bello University Teaching Hospital (ABUTH), Shika, Zaria- Nigeria.

Sample Size Determination: A total of 63 respondents were used for the study, representing 5% of the total population.

Sampling Technique: A simple random sampling technique was employed to select the 63 respondents from the total population.

Instrument: a structured questionnaire was used for data collection. The questionnaire comprised of four sections: sections A, B, C and D. Section A focused on the demographic data of the participants, Section B contained questions on knowledge of covid -19, Section C contained questions on level of

compliance and Section D focused on barriers to covid-19 protocol compliance.

Validity of the instruments: A structured questionnaire was designed, and the validity of the instruments was ascertained by presenting to experts who read through to improve, modify and correct the instrument.

Reliability of the instruments: Pre-testing of the questionnaire was also carried out and modifications based on the results were incorporated into the final questionnaire. The test-retest method was used to assess the reliability of the questionnaire. Internal consistency of items showed an intra-class correlation coefficient of 0.86

Data collection: Questionnaires were shared among participants that met the inclusion criteria. Adequate time was given to participants for the successful completion of the questionnaire.

Data analysis: Afterward, the data collected were first checked for errors, cleaned, and analysed using the Statistical Package for Social Sciences (IBM SPSS version 25). The data were presented descriptively using frequency distribution tables and percentages.

Ethical consideration: An approval to conduct the study was given to the Ethics Committee of Ahmadu Bello University and Amadu Bello Teaching Hospital Zaria. Participants' rights to full disclosure and self-determination were explained. The respondents were informed about the purpose and benefits of the study and assured that their participation will not be used against them in any way. Informed consent was obtained from the respondents before administering the questionnaire and they were assured of the confidentiality of the information given.

RESULTS

Table 1 showed that most 19 (30%) of the respondents were within the age range of 25-29, only a few 5(7.9%) were within the ages of 40 years and above. Majority of the respondents 32(50.8%) were male and married 40 (63.5%). Majority of the respondents 26(41.3%) were nurses. Doctors represent 13(20.6%), Pharmacists and Medical Laboratory Scientists represent 10(15.9%) and 14(22.2%) respectively.

Table 1: Sociodemographic data of the respondents

Variables	No. of Respondents	Percentages (%)
Age		
20-24	14	22.2
25-29	19	30.2
30-34	16	25.4
35-39	9	14.3
40 and above	5	7.9
Total	63	100%
Gender		
Male	32	50.8
Female	31	49.2
Total	63	100%
Marital Status		
Married	40	63.5
Single	23	36.5
Divorced	0	0
Total	63	100%
Tribe		
Hausa	17	27.0
Igbo	12	19.0
Yoruba	19	30.2
Others	15	23.8
Total	63	100%
Religion		
Christianity	35	56.6
Islam	28	44.4
Others	0	0
Total	63	100%
Profession		
Nurse	26	41.3
Doctor	13	20.6
Pharmacist	10	15.9
Lab Scientist	14	22.2
Total	63	100%

Table 2 showed that majority of the respondents 59 (93.7%) believed that Covid-19 is a viral disease while 6.3% said that COVID-19 is not. A total of 93.7% knew that fever, cough, shortness of breath, and fatigue were the main clinical symptoms of COVID-19, while 6.3% of the respondents said otherwise. The majority of the respondents 61(96.8%) knew that symptoms of COVID-19 appear within 2-14 days, 82.5% of the respondents affirmed that COVID-19 spreads via respiratory droplets of infected individuals. Majority of the respondents 49(77.8%) agreed that COVID-19 currently had no vaccine. Some of the respondents 19 (19%) had the notion that carriers without symptoms cannot infect others, while majority of the respondents 51(81%) had the idea that carriers without symptoms can infect others.

Majority of the respondents 57(90.5%) affirmed that regular hand washing can prevent the spread of the virus, while the remaining 9.5% said the contrary. All the respondents 63(100%) affirmed that the use of face masks can prevent the inhalation of droplets. The majority of the respondents 59(93.7%) adhered to the use of hand gloves before touching or carrying out a procedure on the patients. Majority of the respondents 58(92.1%) opined that people who have contact with infected individuals should be isolated. This study concluded that the knowledge level of respondents about COVID -19 preventive measures and protocols is very high with a mean of percentage = 76.9.

Table 2: Knowledge Level of respondents about COVID -19

ITEMS	RESPONSE			
	YES	%	NO	%
1 COVID-19 is a viral disease.	59	93.7	4	6.3
2 The main clinical symptoms of COVID-19 are fever, cough, shortness of breath, and fatigue	59	93.7	4	6.3
3 Symptoms of COVID-19 appear within 2-14 days.	61	96.8	2	3.2
4 The COVID -19 virus spreads via respiratory droplets of infected individuals through the air during sneezing or coughing by infected patients.	52	82.5	11	17.5
5 Currently, COVID-19 has a vaccine.	14	22.2	49	77.8
6 Persons with COVID -19 cannot infect others if he/she has no symptoms of COVID-19.	12	19	51	81
7 Regular handwashing with soap or hand sanitizer can prevent the spread of the infection.	57	90.5	6	9.5
8 The use of facemasks can prevent the inhalation of droplets.	63	100	-	-
9 Hand gloves should be used whenever one wants to touch patients or carry a procedure on patients.,	59	93.7	4	6.3
10 People who have contact with someone infected with the COVID -19 virus should not be isolated.	5	7.9	58	92.1
TOTAL				
Mean of percentage = 76.9				

Table 3 revealed that 92.1% of the respondents were of the opinion that to follow the recommended hand hygiene practices, while 7.9% do not practice the recommended hand hygiene. 92.1% of the respondents use an alcohol-based hand sanitizer or soap and water before touching a patient while only 7.9% said no. While 88.9% of the respondents believed that to use alcohol-based hand sanitizer or soap and water after touching the patient or his/her surroundings. Majority of the respondents

60(95.2%) believed that to use alcohol-based hand rub or soap and water after a clean or aseptic procedure. Also, majority of the respondents 59(93%) believed that to practice general infection control and standard precautions when in contact with patients. On the practice of wearing PPEs, 88.9% of the respondents answered yes, while 11.1% of the respondents said no. This study concluded that the level of compliance was very high with a mean of percentage = 92.1

Table 3: Compliance Level of the respondents to COVID -19 protocols

ITEMS	RESPONSE			
	YES	%	NO	%
1 Do you follow the recommended hand hygiene practices?	58	92.1	5	7.9
2 Do you use an alcohol -based hand rub or soap and water before touching a patient?	58	92.1	5	7.9
3 Do you use an alcohol -based hand rub or soap and water cleaning or aseptic procedure?	60	95.2	3	4.8
4 Do you use an alcohol -based hand rub or soap and water after touching the patient or his/her surroundings?	56	88.9	7	11.1
5 Do you follow Infection Prevention Control (IPC) standard precautions when in contact with any patient?	59	93.7	4	6.3
6 Do you use an alcohol-based hand rub or soap and water after the risk of body fluid exposure	59	93.7	4	6.3
Do you wear personal protective equipment (PPE) when indicated? (PPE includes face masks, gloves, face shields, etc.)	56	88.9	7	11.1
TOTAL				

Mean of percentage = 92.1

Table 4 above showed that the majority 63(69.9%) is of the view that there is no adequate provision of PPEs, while 38.1% of the respondents believed otherwise. For the availability of hand washing facilities with clean running water and hygiene products, majority 63(69.8%) believed in the availability of hand washing facilities with clean running water, while 30.2% do not. Regarding sufficient supply for the collection of sharps and

medical wastes, 50.8% is positive, while 49.2% is negative. Also, 73% of the respondents said there is no training on infection control practices by the institution, while 27% believed there is training on infection control practices. This study therefore submitted that the barrier to compliance to COVID -19 preventive measures and protocols is inadequate provision of PPEs

Table 4: Barriers to compliance to COVID -19 protocols

Variables	Response			
	YES	Percentages (%)	NO	Percentages (%)
Adequate provision of PPEs.	24	38.1	63	69.9*
Availability of handwashing facilities with clean running water and hygiene products.	44	69.8	19	30.2
Sufficient supply for the collection of sharps and medical wastes.	32	50.8	31	49.2
Training on infection control practices by the institution.	17	73	27	46
TOTAL				

DISCUSSION OF FINDINGS

This study determines the level of knowledge and compliance to COVID -19 preventive measures and protocols in Ahmadu Bello University Teaching Hospital (ABUTH), Shika, Zaria, Nigeria. The socio-demographic data of the respondents showed that majority of the respondents are within the age range of 25-29 years and the respondents are both male and female. Findings also revealed that majority of the respondents are married, Yoruba by tribe and Christian by religion. The respondent are majorly Christian by religion and professionally are nursing, doctors and lab scientists.

Knowledge of COVID-19 Preventive measures and protocols

This study reveals that the knowledge level of respondents about COVID -19 is very high with a mean of percentage = 76.9. This study supports a study conducted by the Institute of Public Health, College of Medicine and Health Sciences, United Arab Emirates, Abu Dhabi in 2020, where 85.6% of participants are very knowledgeable about COVID-19. This study is also similar to the findings of Beigel et al., (2020), whose participants are knowledgeable about COVID-19. This study is supported by McIntosh et al., (2019), whose participants are knowledgeable about the causes and prevention of COVID-19.

Compliance of the health workers with COVID-19 preventive measures and protocols

This study shows that the level of compliance is very high with a mean of percentage = 92.1, which is in consistent with Lewis (2020) who showed that respondents' compliance level is high. This study does not corroborate Pan et al (2019) who reveal that the level of hospital staff compliance is low. This study also disagree with Erasmus et al (2010) who observe that there are multiple reports from different countries that has shown that adherence to the use of personal protective equipment reduces the rate of transmission of infection by 40%.

Barriers to Compliance with COVID-19 Preventive measures and protocols

This study indicates that the barriers to compliance to COVID -19 preventive measures and protocols are the inadequate provision of PPEs and a lack of training on infection control practices by the institution. This is in line with studies on the perceived barriers to the practice of preventive measures for the COVID-19 pandemic among health professionals conducted by Mersha et al., (2021) and Birihae et al., 2020) who describe the shortage of PPEs and inadequate training, and trained staffs are the most common barriers that influence the practice of preventive measures. However, regarding the supply of hand-washing facilities, the majority of the respondents with a frequency of 69.8% affirm that there are available handwashing facilities with clean running water in the current study. This is also in contrast with the same study by Mersha et al., (2021) and Birihae et al., 2020) where scarcity of hand cleaning solutions is found to be a barrier to the practice of preventive measures.

CONCLUSION AND RECOMMENDATIONS

The study assesses the level of knowledge and compliance with COVID-19 preventive and protocols among healthcare professionals in Ahmadu Bello University Teaching Hospital, Shika. A cross-sectional descriptive study is used for the study. The data generated are analyzed using statistical measures. Findings reveal that there are high level of knowledge and compliance with COVID-19 preventive measures and protocols among the healthcare professionals, while the institutional supply of PPEs and training on infection control practices is low.

From the findings of this study, most of the health workers have a good level of knowledge and compliance with COVID-19 preventive measures and protocols, however, provision of Personal Protective Equipment (PPE) and training on infection control practices by the hospital is low. Hospital Management should make more efforts on the provision of personal protective equipment for the healthcare professionals to reduce their risk and vulnerability. Also, Hospital Management should also make efforts to see that there are regular training and retraining of healthcare professionals on COVID-19 preventive measures and protocols to sustain their knowledge and compliances.

REFERENCES

- Bai X, Zhou Q, He Y, (2020). Nosocomial Outbreak of Novel Coronavirus Pneumonia in Wuhan, China. *Eur Respir J*
- Beigel JH, Tomashek KM, Dodd LE, Mehta AK, Zingman BS, Kalil AC, (2020). Remdesivir for the Treatment of Covid-19 - Preliminary Report (ACTT-1 Study). *N Engl J Med*.
- Birihane, B. M., Bayih, W. A., Alemu, A. Y., & Belay, D. M. (2020). Perceived Barriers and Preventive Measures of COVID-19 Among Healthcare Providers in Debretabor, North Central Ethiopia. *Risk Management and Healthcare Policy*, 13. <https://doi.org/10.2147/RMHP.S287772>
- CDC. Coronavirus Disease 2019 (COVID-19): COVID-19 Situation Summary. CDC. Available at <https://www.cdc.gov/coronavirus/2019-ncov/summary.html>. February 29, 2020; Accessed: March 2, 2020.
- CDC. Coronavirus Disease 2019 (COVID-19): Recommendations for Cloth Face Covers. Centers for Disease Control and Prevention. Available at <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover.html>. April 3, 2020; Accessed: April 6, 2020.
- Chang Y, Luo R, Wang K, Zhang M, Wang Z, Dong L, Li J, Yao Y, Ge S, Xu G (2020). Kidney disease is associated with in-hospital death of patients with COVID-19. *Kidney Int*. 97(5):829-838.
- Chen N, Zhou M, Dong X, Qu J, Gong F, Han Y, Qiu Y, Wang J, Liu Y, Wei Y, Xia J, Yu T, Zhang X, Zhang L. (2020) Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. *Lancet*. Feb 15; 395(10223):507-51
- Chin AWH, Chu JTS, Perera MRA, et al. Stability of SARS-CoV-2 in different environmental conditions. *The Lancet Microbe*. April 2, 2020.
- Chin P, Hao X, Lau EHY, et al. Real-time tentative assessment of the epidemiological characteristics of novel coronavirus infections in Wuhan, China, as of 22 January 2020. *Euro Surveill*.2020; 25(3)
- Erasmus, V., Daha, T. J., Brug, H., Richardus, J. H., Behrendt, M. D., Vos, M. C., & van Beeck, E. F.(2010). A systematic review of studies on compliance with hand hygiene guidelines in hospital care'. *Infection Control & Hospital Epidemiology*, 31, 283–294. 10.1086/650451
- Feyisa, Z. T. (2021). Factors limiting youths' practice of preventive measures toward the outbreak of COVID-19 in Oromia special zone surrounding Finfinnee, Ethiopia. *PLOS ONE*, 16(3).
- Gorbalenya AE. (2020) Severe acute respiratory syndrome-related coronavirus–The species and its viruses, a statement of the Coronavirus Study Group. Available at <https://doi.org/10.1101/2020.02.07.937862>
- Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, Zhang L, Fan G, Xu J, Gu X, Cheng Z, Yu T, Xia J, Wei Y, Wu W, Xie X, Yin W, Li H, Liu M, Xiao Y, Gao H, Guo L, Xie J, Wang G, Jiang R, Gao Z, Jin Q, Wang J, Cao B. (2020) Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*. 395(10223):497-506.
- Huang, C. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet* 395, 497–506.
- Lewis D. Is the coronavirus airborne? Experts can't agree. *Nature* 2020; 580: 175. doi:10.1038/d41586-020-00974-w
- Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, Ren R, Leung KSM, Lau EHY, Wong JY, Xing X, Xiang N, Wu Y, Li C, Chen Q, Li D, Liu T, Zhao J, Liu M, Tu W, Chen C, Jin L, Yang R, Wang Q, Zhou S, Wang R, Liu H, Luo Y, Liu Y, Shao G, Li H, Tao Z, Yang Y, Deng Z, Liu B, Ma Z, Zhang Y, Shi G, Lam TTY, Wu JT, Gao GF, Cowling BJ, Yang B, Leung GM, Feng Z (2020). Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus-Infected Pneumonia. *N Engl J Med*.; 382(13):1199-120
- Mersha, A., Shibiru, S., Girma, M., Ayele, G., Bante, A., Kassa, M., Abebe, S., & Shewangizaw, M. (2021). Perceived barriers to the practice of preventive

- measures for COVID-19 pandemic among health professionals in public health facilities of the Gamo zone, southern Ethiopia: a phenomenological study. *BMC Public Health*, 21(1).
- McIntosh K, Hirsch MS Bloom A. Coronavirus disease 2019 (COVID-19). *UpToDate* Hirsch MS, Bloom A (Eds) Accessed Mar. 2020; 5
- Morawska L, Milton DK. (2020) It is Time to Address Airborne Transmission of COVID-19. *Clinical Infectious Diseases*.
- Nwana OC (1995). *Introduction to educational research for student teachers*. Ibadan: Heinemann Educational Books Ltd.
- Pan F, Ye T, Sun P, Gui S, Liang B, Li L, et al. (2020) Time course of lung changes on chest CT during recovery from 2019 novel coronavirus (COVID-19) pneumonia. *Radiology*.:200370
- Rabin RC. (2020) Lost Sense of Smell May Be Peculiar Clue to Coronavirus Infection. *The New York Times*. Available at <https://www.nytimes.com/2020/03/22/health/coronavirus-symptoms-smell-taste.html>. Accessed: March 24, 2020.
- Spinato G, Fabbris C, Polesel J, Cazzador D, Borsetto D, Hopkins C, (2020). Alterations in Smell or Taste in Mildly Symptomatic Outpatients With SARS-CoV-2 Infection. *JAMA*.
- Saqlain M, Munir M.M, Rehman S.U, Gulzar A, Naz S, Ahmed Z, Tahir A.H, and Mashhood M (2020). Knowledge, attitude, practice and perceived barriers among healthcare professionals regarding COVID-19: A Cross-sectional survey from Pakistan. *medRxiv*. doi: 10.1101/2020.04.13.20063198
- Zhang M, Zhou M, Tang F, Wang Y, Nie H, Zhang L, and Youc G (2020). Knowledge, attitude and practice regarding COVID-19 among health care workers in Henan, China. *Journal of Hospital Infection*. doi: 10.1016/j.jhin.2020.04.012

