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THE ATTITUDE OF HEALTH WORKERS IN HEALTH CENTRES DURING AND AFTER COVID 19 OUTBREAK IN IBADAN NORTH LOCAL GOVERNMENT AREA OF OYO STATE

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Annotation: Coronavirus infection (COVID-19) is an emerging infectious illness which broke out during the winter of 2019. It is a disease caused by a newly emerging novel coronavirus called Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV2) that appeared in late 2019. Its spread was reported to be very rapid beyond control thereby bringing about different measures to curb its spread and to date many are still skeptical about its reality creating a gap in the preventive measure's adherence. This study examined attitude of health workers in health center's during and after covid 19 outbreak in Ibadan North Local Government Area of Oyo State.

Three research questions as well as two null hypotheses were formulated by the researcher to guide this study. A descriptive research survey design was adopted for this study using a proportional sampling technique to select 130 respondents to participate in this study and ethical approval was followed accordingly. The instrument for data collection was a self-structured questionnaire. Out of the 130 questionnaires distributed to the respondents, 12 were completely filled, returned, analyzed, and presented in frequency count tables and percentages.

Findings revealed that there is a good attitude of health workers in health center's during and after Covid 19 outbreak as 8(6.3%) and 83(65.9%) of the respondents agreed and strongly agreed that they avoid touching anything at the health facility with bare hand during the Covid 19 outbreak. There is also good behaviors of health workers towards Covid 19 safety precautions practice as 77(61.1%) and 14(11.1%) of the respondents agreed and strongly agreed that they use face mask while going to work and while attending to patients in the hospital. Also, several factors influences Covid 19 safety precautions practice among health workers as 97(77.0%) of respondents affirmed that lack of provision of use face mask at the hospital prevent you from using it during the Covid 19 outbreak,

In conclusion, the respondents have good attitudes and behaviors during and after covid 19 outbreak. It is thus recommended that Government authorities (Federal, State, and Local Government level) stake holders, non-governmental organization, religious organization and policy maker should ensure provision of appropriate Covid-19 preventive measure facilities and personal protective equipment's to support health workers are provided.

Key words: Attitude, Behaviour, Covid-19, health workers.

Background to the Study

Coronavirus infection (COVID-19) is an emerging infectious illness which broke out during the winter of 2019 (WHO, 2020). It is a disease caused by a newly emerging novel coronavirus called Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV2) that appeared in late 2019 disseminating to cause a global pandemic in 2020. It is related to the SARS-CoV and Middle Eastern Respiratory Coronavirus (MERS-CoV) that emerged in the early 2000s in East Asia and the Middle East respectively (Center for Disease Control and Prevention, 2020). These viruses are of zoonotic origin with SARS-CoV2 thought to have originated in bats. An alarming response has been introduced across the globe due to its high infectiousness and case fatality rate (Zhong Luo, Li, Zhang, Liu, Li and Li, 2020).

Initially, most cases of the disease (index cases) at the epicenter of the outbreak in Wuhan, Hubei province, China, were as a result of animal to human transmission. However, human-to-human transmission from respiratory droplets and contact with contaminated surfaces has been implicated in subsequent cases (Adhikari, Meng and Wu, 2020; Hassan, Sheikh, Jamal, et al., 2020). On 31st December 2019, the World Health Organization (WHO) was informed of a cluster of cases of pneumonia of unknown cause detected in Wuhan City, Hubei Province of China. The causative virus of the disease was identified by Chinese authorities on 7th January, 2020. And WHO declared the outbreak, a Public Health Emergency of International Concern (PHEIC) on 30 January 2020, and a pandemic on 11th March, 2020 (World Health Organization, 2020).

Nigeria reported its first case on 27th February, 2020 when an Italian citizen tested positive for the virus after returning from Italy, and currently has recorded 168,713 cases and 2,124 deaths (Maclean and Dahir, 2020). The highest cases recorded in Lagos State with 60,519, FTC 19,911, Kaduna 19,127, Plateau 9,068, Rivers 7,367, and Oyo 6,883. By virtue of the level of poverty and battered economy, social distancing may be difficult to sustain in the context of Africa because of the low level of development (NCDC, 2021).

Symptoms of this highly contagious disease include dry cough, fever, anosmia (loss of smell), weakness, headache, body pains, vomiting, sore throat, and respiratory difficulty, and the onset of symptoms ranges from 1–14 days (Ahmed, 2020). Some infected individuals may remain asymptomatic (without symptoms) after contracting the virus, whereas among the symptomatic cases, the majority of them are mild or moderate, with about 10% being severe (Daniel & Oran, 2020). While all age groups can equally contract the virus, the elderly are more vulnerable. Other vulnerability factors are obesity, underlying medical conditions such as

diabetes mellitus, systemic hypertension and other cardiac pathologies, and immune compromising diseases such as HIV infection. Similarly, mortality rate has been reported to be higher among these categories of people (Ahmed, 2020; Chen, 2020; and Guan, 2020).

One of the primary ways in which infectious diseases like COVID-19 spread from person to person is through our hands. This can happen by physical contact with an infected person or by touching contaminated surfaces with droplets of the SARS-CoV-2 -the virus that causes COVID-19. The virus can live on surfaces for several hours. Therefore, practicing proper hand hygiene is integral to managing the COVID-19 outbreak. There is evidence that appropriate hand hygiene prevents up to 50% of preventable infections acquired during health care delivery, including those affecting health workers. Appropriate hand hygiene also reduces the risk on SARS-CoV-2 infection among health workers (NCDC, 2021).

This ravaging scourge affect all ages, races but more severe in older people with medical co-morbidities and are more likely affected and lead to poor outcomes. A severe case of the disease can lead to respiratory failure, acute respiratory distress syndrome, cardiac failure, and finally death of its host. However, despite various safety precautionary measures being observed in several places, the battle against COVID-19 continues to rage on with an exponential increase in confirmed cases in many quarters. According to Abati, (2020), this rise is due to superstitions and ignorance of the science behind the infection prefer only to pray (even violating the social distancing rule by attending churches or mosques during the lockdown) and use anointing oils, talisman, herbs or rituals to prevent contracting and spreading the virus. Some also use social media platforms (e.g. Whatsapp, Twitter, Facebook and Instagram) to spread fear, project fake news concerning the source of the virus, promote prejudice and undermine medical advice deliberately or ignorantly (Hassan, 2020; Abati, 2020).

Considering that there is no treatment currently available against the disease, preventive measures appear to be the most effective scientific evidence to curtail the high spread and mortality associated with it. These measures include practices such as regular hand washing with soap and water and the use of alcohol-base hand sanitizer. Others are wearing face masks in public places, avoiding crowded places, and maintaining social distancing (Ahmed, 2020).

Vaccines has been manufactured to prevent the further spread of the Coronavirus disease. On 2nd March 2021, Nigeria received nearly 4 million doses of the COVID-19 vaccine, shipped via the COVAX Facility, a partnership between Coalition for Epidemic Preparedness Innovations (CEPI), Gavi – the Vaccine Alliance, UNICEF and the World Health Organization (WHO). The COVAX is co-led by Gavi, WHO and the CEPI, working in partnership with UNICEF, the World Bank, Civil Society Organizations, manufacturers, and others. The COVAX is part of the Access to COVID-19 Tools (ACT) Accelerator, a ground-breaking global collaboration to accelerate development, production, and equitable access to COVID-19 tests, treatments, and vaccines. Osun State recorded its first case of the virus on 25 March 2020, and as of March 2021, when the vaccination began it reported 2480 confirmed cases. However, it currently recorded total case of 2578 with 52 deaths. Osun State Government received 64,240 doses of the Oxford/AstraZeneca vaccine through the Federal Government to vaccinate the first batch of frontline health care workers (NCDC, 2021).

The level of knowledge of a disease condition is associated with attitude towards the disease, and these interact to substantially affect the practices and measures aimed at controlling it (Ayinde Usman and Posi, 2020). One study in Pakistan that examined medical students' knowledge, perceptions, and behavioral intentions towards the H1N1 influenza observed that inadequate knowledge and a negative attitude are associated with poor compliance with practices designed to prevent the spread of the disease (Hussain, Sheikh and Jamal, 2012). In other studies, it was also found that adequate knowledge propels individuals to comply with practices and measures that promote good health (Aziz, Abd El-Megeed and AbdEllatif, 2018; Rahman and Sathi, 2020).

The nature of health care workers job puts them at an increased risk of catching any communicable disease, including COVID-19. In a study carried out by Alao**,** Durodola, Ibrahim and Asinobi (2020) on assessment of health care workers knowledge about, attitudes towards, beliefs on, and use of PPE to prevent SARS-CoV-2 infection in a resource-limited setting, findings shows poor attitudes towards the use of PPE, as less than 5.0% admitted using PPE when required. This rate is lower than the 55.0% compliance found among Chinese HCWs during the 2009 pandemic, the 52% compliance reported by McGaw, Tennant, Harding, Cawich, Crandon and Walters (2012) among physicians, and the 65% compliance among nurses in Jamaica. The poor attitudes towards using PPE are concerning, as nosocomial COVID-19 infections among HCWs will have negative consequences in low-middle-income countries like Nigeria, where there is already an inadequate supply of healthcare personnel. The poor attitudes towards PPE use may be due to non availability, increased pressure on merger consumables, or global shortage of PPE, as approximately three-quarters of the respondents were willing to use PPE if it was made available by the facility.

Statement of the Problem

Covid 19 pandemic has caused global social disruption by limiting global social relations. The idea of "social distancing" negates regular social interaction, which is the bedrock of human society (Amzat and Razum, 2014). A contagious disease of global health importance also disrupts the usual norms of close physical contacts since the disease can be transmitted through contact with individuals who already contracted the disease. COVID-19 deglobalizes the world in terms of human migration with airports shut, and social events (sports, festivals and the like) postponed indefinitely.

Nigeria, just like other countries of the world is still in continuous battle against the Covid-19 pandemic. Several control measures have been introduced by both the state and Federal Government to fight the disease since its outbreak – the former through the ministries of health and the later, through the Nigeria Center for Disease Control and Prevention (NCDC) under the leadership of the Presidential Task Force (PTF) on Covid-19. These include closing of land and sea borders, airports, and all public places, such as open markets and schools, compulsory hand washing with soap under running water or use of alcohol-based hand sanitizer, social distancing of at least 1 meter, and use of nose mask. In spite of all these measures, the disease is still ravaging the country. To guarantee final success, people's adherence to control measures against Covid-19 is essential, which is determined by their knowledge, attitudes, and practices. However, this adherence is not completely among people.

The attitude of health workers in health centers during covid 19 outbreak was a factor in the success of the battle against this dreaded disease. To facilitate the outbreak management of COVID-19 in Nigeria, there is an urgent need to understand the public's level of knowledge of COVID-19 at this critical moment. Despite the surge in the level of media dispersion of information on Covid-19, the researcher observed that health workers in Ibadan North Local Government, Oyo state are refused patients even with minor illnesses during the Covid 19 outbreak. Hence, this study aims examining attitude of health workers in health centers during and after covid 19 outbreak in Ibadan North Local Government Area of Oyo State.

Significance of the Study

The findings of this study will be of benefit to the following groups of people, health workers, the Government, and future researchers.

No doubt, this study will be of great benefit to the Health Workers, as it will help them see how their attitude at the health centers during Covid 19 outbreak affect actual preventive measures of Covid 19 and thus prompt adequate planning and implementation of interventions to help curb the spread of Covid-19 so as to promote the health standard in the society. Also, the findings from this study will help the government and non-governmental organizations in planning and implementing a sustainable intervention to ensure Covid-19 protocols adherence to promote the health of the citizens of the society. The study will contribute to the

existing body of knowledge on examining the attitude of health workers in health centres during covid 19 outbreak to future researchers, findings of this study will serve as reference material for further study.

General Objective

The general objective of this study is to examine the attitude of health workers in health centres during and after covid 19 outbreak in Ibadan North Local Government Area of Oyo State.

Specific Objectives

The specific objectives of the study are:

1. to assess the attitude of health workers in health centers during and after Covid 19 outbreak
2. to examine the behavior of health workers towards Covid 19 safety precautions practice
3. to determine the factors influencing Covid 19 safety precautions practice among health workers

Research Questions

The following research questions guided the study:

1. What is the attitude of health workers in health centers during and after covid 19 outbreak?
2. What are the behaviors of health workers towards Covid 19 safety precautions practice?
3. What are the factors influencing Covid 19 safety precautions practice among health workers?

Research hypothesis

HA1: there is a relationship between attitudes of health workers and prevention of Covid 19

HA2: there is relationship between behaviors of health workers and prevention of Covid 19

MATERIAL AND METHOD

3.1 Study Design

The study setting was Ibadan North Local Government in Oyo State, Nigeria. Ibadan North Local Government is one of the five (5) metropolitan local government areas of Ibadan land or better put, one of the eleven (11) councils of Ibadan land and one of the thirty-three (33) local councils areas of Oyo State. Ibadan created out of the old Ibadan municipal council areas on 19th of September 1991. The Headquarter situates at quarter 87, Agodi GRA; opposite the government house and beside the state NYSC Secretariat.

A descriptive cross-section study design was used investigate the attitude of health workers in health center's during covid 19 outbreak in Ibadan North Local Government Area of Oyo State.

Study Population

The population for this study comprised all the health workers selected from the fifteen (15) primary health care centers in Ibadan North Local Government, with an estimate population of one hundred and seventy-four (174) health workers (Ibadan North Local Government, 2022).

Sample and sampling Techniques

Total enumeration sampling procedure was used to select all the health facilities in Ibadan North Local Government. A proportional sampling procedure will be used to select 90% of the population on each center.

Below is the breakdown of the health facility and how the respondent was selected.

List of all the primary health care centers in Ibadan North Local Government Area

S/N	Name of Health Facilities	Number of health workers	Proportional 90% of the number
1	Agbowo PHC	16 health workers	14
2	Sango PHC	10 health workers	9
3	Barika PHC	14 health workers	13
4	Samonda H/C	11 health workers	10
5	Oke-itunnu H/C	9 health workers	8
6	Sabo H/C	9 health workers	8
7	Bodija PHC	17 health workers	15
8	Ago-Tappa PHC	11 health workers	10
9	Obasa H/C	13 health workers	12
10	Mokola Heath clinic	10 health workers	9
11	Idi Ogungun PHC	14 health workers	13
12	Basorun PHC	15 health workers	14
13	OKe Gate H/C	8 health workers	7
14	Ashi Health Post	5 health workers	5
15	Agodi-Gate H/C	12 health workers	11
	TOTAL	**174 health workers**	

(Source: Ibadan North Local Government, 2022)

Sample size

Since the total population of health workers in the selected Primary Health Care Centres, being one hundred and seventy four (174) is a definite number, Yaro Yamme formula was used to determine the sample size for the study.

Yaro Yamme formula

$$n = \frac{N}{1 + N (e)2}$$

Where N = total population from previous study

n = sample size

e = 0.05

$$n = \frac{174}{1+ 174 (0.05)2}$$

$$n = \frac{174}{1 + 174 \times 0.0025}$$

$$n = \frac{174}{1 + 0.435}$$

$$n = \frac{174}{1.435} = 121.2$$

One hundred and thirty (130) respondents was used to take care of respondents that might not return the questionnaire on time or even fail to return it.

Method for Data Analysis

The data collected was coded, entered, cleaned, and analyzed using a computer software package called Statistical Package for Social Sciences (SPSS) version 25. Frequency counts tables and percentages (%) were used for the presentation of the data and inferential statistics were used such as chi-square to determine the level of association between selected independents and dependents variables at a p-value less than 0.05.

Ethical Consideration

Letter of introduction was collected from the Department of Primary Health Care Tutor's course, University College Hospital, Ibadan. This was presented to the Officers incharge of selected primary health care centers for approval in order to allow for data collection and consent of the health workers, who are the respondents. Furthermore, the questionnaires had no identifiers to ensure anonymity and confidentiality of the participants. Only aggregate data was reported, individual data was kept in strict confidence and used only for research purposes.

RESULT

Section A: Demographic Variables of Respondents

Table 4.1: Demographic Variables of Respondents

S/N	Variable	Frequency	Percentage
1	**Age (years)**		
	18-28 years	33	26.2
	29-38 years	70	55.6
	39 years and above	23	18.3
2	**Gender**		
	Male	42	33.3
	Female	84	66.7
3	**Religion**		
	Christianity	75	59.5
	Islam	45	35.7
	Traditionalist	6	4.8
4	**Profession**		
	Community health	60	47.6
	Nurse	27	21.4
	Medical doctor	4	3.2
	Pharmacy	4	3.2
	Health information manager	21	16.7
	others (please specify)	10	7.9
	TOTAL	**126**	**100.0**

The above table revealed that, out of the 126 respondents 33(26.2%) were between the age of 18-28years; 70(56.6%) were between the age of 29-38years, 23(18.3%) were between the age 39 years and above. This indicate that majority of the respondents 70(56.6%) were between the age of 29-38years; 42(33.3%) were male, while 84(66.7%) were females. This indicated that majority of the respondents 84(66.7%) are females. 75(59.5%) were Christians, 45(35.7%) of the total respondents were Islam, while 6(4.8%) respondents were traditionalist. This indicated that majority of the respondents 70(55.6%) were Christians; 60(47.6%)

respondents were community health workers, 27(21.4%) were nurses, 4(3.2%) were medical doctors, 4(3.2%0 were pharmacy technicians, 21(16.7%0 were health information mangers, while 10(7.9%) were of other professions. This indicated that majority of the respondents 60(47.6%) were community health workers.

Section B: Analysis of Research Questions

Research Question One: What is the attitude of health workers in health centres during and after covid 19 outbreak?

Attitude of health workers in health centres during and after Covid 19 outbreak

S/N	Question items	A		SA		D		SD		Total	
		F	%	F	%	F	%	F	%	F	%
5	Do you abscond from work during Covid 19 outbreak to avoid contacting it?	27	21.4	8	6.3	13	10.3	78	61.9	122	100.0
6	Do you refer all cases brought to your unit due to fear of contracting Covid 19?	15	11.9	20	15.9	72	57.1	19	15.1	122	100.0
7	Do you avoid touching anything at the health facility with bare hand during the Covid 19 outbreak?	8	6.3	83	65.9	24	19.0	11	8.7	122	100.0
8	Do you disinfect all surface area after discharging patients from the wards?	19	15.1	72	57.1	23	18.3	12	9.5	122	100.0
9	Do you check temperature of every patient that came to hospital before admission?	81	64.3	10	7.9	10	7.9	25	19.8	122	100.0
10	Did you attend to all patients under your care with bare hand just to avoid stigmatization?	0	0.0	0	0.0	31	24.6	95	75.4	122	100.0
11	Do you absentee yourself from duty due to fear of contacting Covid 19?	35	27.8	0	0.0	91	72.2	0	0.0		
12	Does a benefit of taking Covid 19 vaccine supersede the associated minor side effects?	96	76.2	0	0.0	0	0.0	30	23.8		

The above tables revealed that 27(21.4%) and 8(6.3%) of the respondents agreed and strongly agreed that they abscond from work during Covid 19 outbreak to avoid contacting it, while 13(10.3%) and 78(61.9%) disagreed and strongly disagreed respectively that they abscond from work during Covid 19 outbreak to avoid contacting it; 15(11.9%) and 20(15.9%) agreed and strongly agreed that they refer all cases brought to their unit due to fear of contracting Covid 19, while 72(57.1%) and 19(15.1%) disagreed and strongly disagreed respectively that they refer all cases brought to their unit due to fear of contracting Covid 19; 8(6.3%) and 83(65.9%) agreed and strongly agreed that they avoid touching anything at the health facility with bare hand during the Covid 19 outbreak, while 24(19.0%) and 11(8.7%) disagreed and strongly disagreed respectively that they avoid touching anything at the health facility with bare hand during the Covid 19 outbreak; 19(15.1%) and 72(57.1%) agreed and strongly agreed that they disinfect all surface area after discharging patients from the wards, while 23(`8.3%) and 12(9.5%) disagreed and strongly disagreed respectively that they disinfect all surface area after discharging patients from the wards; 81(64.3%) and 10(7.9%) agreed and strongly agreed that they check temperature of every patient that came to hospital before admission, while 10(7.9%) and 25(19.8%) disagreed and strongly disagreed respectively that they 10(7.9%). 0(0.0%) and 0(0.0%) agreed and strongly agreed that they attend to all patients under their care with bare hand just to avoid stigmatization, while as large as 31(24.6%) and 95 (75.4%) disagreed and strongly disagreed respectively that they attend to all patients under their care with bare hand just to avoid stigmatization. 35(27.8%) and 0(0.0%) agreed and strongly agreed that they absentee yourself from duty due to fear of contacting Covid 19, while as large as 91(72.2%) and 0(0.0%) disagreed and strongly disagreed respectively that they 0(0.0%). 96(76.2%) and 0(0.0%) agreed and strongly agreed that the benefit of taking Covid 19 vaccine supersede the associated minor side effects, while as large as 0(0.0%) and 0(0.0%) disagreed and strongly disagreed respectively that the benefit of taking Covid 19 vaccine supersede the associated minor side effects.

Research Question Two: What are the behaviours of health workers towards Covid 19 safety precautions practice?

Behaviours of health workers towards Covid 19 safety precautions practice?

S/N	Question items	A		SA		D		SD		Total	
		F	%	F	%	F	%	F	%	F	%
13	I use face mask while going to work and while attending to patients in the hospital	77	61.1	14	11.1	35	27.8	0	0.0	122	100.0
14	Regular hand washing is tiresome to me, so I don't wash hands regularly	35	27.8	0	0.0	8	6.3	83	65.9	122	100.0
15	I don't like the scent of hand sanitizer, so I don't use it	27	21.4	8	6.3	76	60.3	15	11.9	122	100.0
16	I will not take Covid 19 vaccine due to fear of the side effect	35	27.8	0	0.0	87	69.0	4	3.2	122	100.0
17	I cannot stop having hand shake with fellow staff	35	27.8	0	0.0	87	69.0	4	3.2	122	100.0
18	I maintained social distancing at the work place during the	82	65.1	9	7.1	3	2.4	32	25.4	122	100.0

	Covid 19 outbreak										
19	I bends my elbow or use tissue paper (and disposed immediately) while coughing to curb the spread of Covid-19 disease.	86	68.3	5	4.0	3	2.4	32	25.4		
20	Does a benefit of taking Covid 19 vaccine supersede the associated minor side effects?	96	76.2	0	0.0	0	0.0	30	23.8		
21	Do you think that reusing face mask is ideal especially among health staff?	35	27.8	0	0.0	0	0.0	91	72.2		
22	Adequate indoor ventilation reduces chances of spread of Covid 19	0	0.0	91	72.2	35	27.8	0	0.0		
23	I must not wear face mask to protect myself from Covid 19	35	27.8	0	0.0	91	72.2	0	0.0		
24	I frequently cleans and disinfects surfaces in the hospital to promote Covid 19 prevention	72	57.1	19	15.1	11	8.7	24	19.0		
25	I sneeze in my elbow or in use napkin to avoid the spread of Covid 19	91	72.2	0	0.0	35	27.8	0	0.0		

The above tables revealed that 77(61.1%) and 14(11.1%) of the respondents agreed and strongly agreed that they they use face mask while going to work and while attending to patients in the hospital, while 35(27.8%) and 0(0.0%) disagreed and strongly disagreed respectively that they use face mask while going to work and while attending to patients in the hospital; 35(27.8%) and 0(0.0%) agreed and strongly agreed that regular hand washing is tiresome to me, so they don't wash hands regularly, while 8(6.3%) and 83(65.9%) disagreed and strongly disagreed respectively that regular hand washing is tiresome to me, so they don't wash hands regularly; 27(21.4%) and 8(6.3%) agreed and strongly agreed that they don't like the scent of hand sanitizer, so they don't use it, while 76(60.3%) and 15(11.9%) disagreed and strongly disagreed respectively that they don't like the scent of hand sanitizer, so they don't use it; 35(27.8%) and 0(0.0%) agreed and strongly agreed that they will not take Covid 19 vaccine due to fear of the side effect, while 87(69.0%) and 4(3.2%) disagreed and strongly disagreed respectively that they will not take Covid 19 vaccine due to fear of the side effect; 35(27.8%) and 0(0.0%) agreed and strongly agreed that they cannot stop having hand shake with fellow staff, while 87(69.0%) and 4(3.2%) disagreed and strongly disagreed respectively that they cannot stop having hand shake with fellow staff. 82(65.1%) and 9(7.1%) agreed and strongly agreed that they maintained social distancing at the work place during the Covid 19 outbreak, while as large as 3(2.4%) and 32 (25.4%) disagreed and strongly disagreed respectively that they maintained social distancing at the work place during the Covid 19 outbreak. 86(68.3%) and 5(4.0%) agreed and strongly agreed that they bends their

elbow or use tissue paper (and disposed immediately) while coughing to curb the spread of Covid-19 disease, while as large as 3(2.4%) and 32 (25.4%) disagreed and strongly disagreed respectively that they maintained social distancing at the work place during the Covid 19 outbreak. 96(76.2%) and 0(0.0%) agreed and strongly agreed that benefits of taking Covid 19 vaccine supersede the associated minor side effects, while as large as 0(0.0%) and 30(23.8%) disagreed and strongly disagreed respectively that a benefit of taking Covid 19 vaccine supersede the associated minor side effects. 35(27.8%) and 0(0.0%) agreed and strongly agreed they think that reusing face mask is ideal especially among health staff, while 0(0.0%) and 91(72.2%) disagreed and strongly disagreed respectively that they think that reusing face mask is ideal especially among health staff. 0(0.0%) and 91(72.2%) agreed and strongly agreed that adequate indoor ventilation reduces chances of spread of Covid 19, while 35(27.8%) and 0(0.0%) disagreed and strongly disagreed respectively that adequate indoor ventilation reduces chances of spread of Covid 19. 35(27.8%) and 0(0.0%) agreed and strongly agreed that they must not wear face mask to protect myself from Covid 19, while 91(72.2%) and 0(0.0%) disagreed and strongly disagreed respectively that they must not wear face mask to protect myself from Covid 19. 72(57.1%) and 19(15.1%) agreed and strongly agreed that they frequently cleans and disinfects surfaces in the hospital to promote Covid 19 prevention, while 11(8.7%) and 24(19.0%) disagreed and strongly disagreed respectively that they frequently cleans and disinfects surfaces in the hospital to promote Covid 19 prevention. 91(72.2%) and 0(0.0%) agreed and strongly agreed that they sneeze in my elbow or in use napkin to avoid the spread of Covid 19, while 35(27.8%) and 0(0.0%) disagreed and strongly disagreed respectively that they sneeze in my elbow or in use napkin to avoid the spread of Covid 19.

Research Question Three: What are the factors influencing Covid 19 safety precautions practice among health workers?

Factors influencing Covid 19 safety precautions practice among health workers

S/N	Question items	Yes		No		Total	
		F	%	F	%	F	%
26	Does lack of provision of use face mask at the hospital prevent you from using it during the Covid 19 outbreak?	97	77.0	29	23.0	122	100.0
27	Does lack of provision of hand gloves at the hospital prevent you from using it during the Covid 19 outbreak?	85	67.5	41	32.5	122	100.0
28	Does non use of face mask by fellow staff, discourage you from putting on face mask?	35	27.8	91	72.2	122	100.0
29	Does fear of rejection among fellow staff, prevents you from observing social distancing while in the hospital?	24	19.0	102	81.0	122	100.0
30	Does lack of facility for hand washing prevent you from regular hand washing while at the hospital?	93	73.8	33	26.2	122	100.0
31	Does limited knowledge of etiology and mode of spread of Covid 19 make you not to take positive measures to prevent it?	101	80.2	25	19.8	122	100.0

The above tables revealed that 97(77.0%) of respondents affirmed that lack of provision of use face mask at the hospital prevent you from using it during the Covid 19 outbreak, while 29(23.0%) refuted that. Larger number 85(67.5%) affirmed that lack of provision of hand gloves at the hospital prevent you from using it during the Covid 19 outbreak, while larger number 41(32.5%) do not know. 35(27.8%) of them agreed that non use of face mask by fellow staff, discourage you from putting on face mask, while 91(72.2%) refuted that.

24(19.0%) affirmed that fear of rejection among fellow staff, prevents you from observing social distancing while in the hospital, while 102(81.0%) of them refuted that. 93(73.8%) said that lack of facility for hand washing prevent you from regular hand washing while at the hospital, while 33(26.2%) refuted that. 101(80.2%) affirmed that limited knowledge of etiology and mode of spread of Covid 19 make you not to take positive measures to prevent it, while 25(19.8%) do not agree to that.

Research Hypothesis

Two Null hypothesis were formulated to guide this research work and were tested using the chi-square statistical analysis.

Null Hypothesis one (HO1): There is relationship between attitudes of health workers and the prevention of Covid 19 in Ibadan North Local Government Area of Oyo State.

Cross-tabulation between attitude and prevention of Covid 19

Attitude of respondents		Gender		Total	Chi-square	p-value
		Male	Female			
5-8 good attitude	Yes	8	39	47		
	No	40	33	73	9.87	2.7
9-12 poor attitude	Yes	3	12	15		
	No	45	60	105	6.79	1.9

The above table revealed the value of chi-square: $x^2 = 9.87$ and 6.79 with p-value of 2.7 and 1.9 respectively.

Decision Rule: If the calculated value is greater than the tabulated value, the Null hypothesis is rejected otherwise accepted. But from the calculation, the calculated value is greater than the tabulated value therefore Null hypothesis is rejected

Conclusion: H_{01}: There is a relationship between attitudes of health workers and the prevention of Covid 19 in Ibadan North Local Government Area, Oyo State.

Null Hypothesis two (HO2): there is no relationship between behavior's of health workers and prevention of Covid 19

Cross-tabulation between behavior of health workers and prevention of Covid 19

Behavior of health workers			Chi-square	p-value
	Yes	No		
18. Have you ever watched pornography on social media?	65	55	12.8	7.2
19. If yes, did you feel like having sex afterward?	38	27	7.9	2.5

The above table revealed the value of chi-square: $x^2 = 12.8$ and 7.9 with p-value of 7.2 and 2.5 respectively.

Decision Rule: If calculated value is greater than tabulated value, Null hypothesis is rejected otherwise accepted.But from this calculation, the calculated value is greater than tabulated value therefore Null hypothesis is rejected

Conclusion: H_{02}: There is significant association between behavior of health workers and prevention of Covid 19.

DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

Discussion of Findings

Section A: Demographic Data

This finding indicated that majority of the respondents 70(56.6%) were between the age of 29-38years; majority of the respondents 84(66.7%) are females; majority of the respondents 70(55.6%) were Christians and majority of the respondents 60(47.6%) were community health workers. This indicated that age, gender, religion and occupation has a relationship to attitude and behavior towards and after Covid 19 outbreak. This is in agreement with the study carried out by Abdelhafiz, Mohammed and Ibrahim (2020), where it was revealed that there was no significant association between participants' characteristics, i.e., their gender, education level, age, and health condition, and their attitude towards COVID-19 ($P > 0.05$). However, there was a statistically significant association between gender and the practice of going out to crowded places during the pandemic ($P = 0.005$) as 131 (91.6%) of female participants reported avoiding any crowded places compared to 70 (78.7%) male participants.

Section B: Attitude of health workers in health centres during and after Covid 19 outbreak

The findings of the study showed that there is good attitude of health workers in health centres during and after Covid 19 outbreak in Ibadan North Local Government Area of Oyo State, as 8(6.3%) and 83(65.9%) of the respondents agreed and strongly agreed that they avoid touching anything at the health facility with bare hand during the Covid 19 outbreak. 19(15.1%) and 72(57.1%) agreed and strongly agreed that they disinfect all surface area after discharging patients from the wards. This was in agreement with that of the study carried out by Mahmudur, Tajuddin, Quazi, & Mamun (2021), where majority of their study participants (78.9%), had a positive attitude towards the safety precautionary measures of Covid-19 disease. Also with that of Minjung, Bee-Ah & Myoungsoon, (2020) who in their own study among their respondents in North-Central Nigeria, the attitude of the respondents towards Coronavirus precautionary measures was positive (78.5%).

Section C: Behaviour of health workers towards Covid 19 safety precautions practice

The findings of the study showed that there is good behaviour of health workers towards Covid 19 safety precautions practice in Ibadan North Local Government Area of Oyo State as 77(61.1%) and 14(11.1%) of the respondents agreed and strongly agreed that they use face mask while going to work and while attending to patients in the hospital, only 35(27.8%) and 0(0.0%) agreed and strongly agreed that regular hand washing is tiresome to me, so they don't wash hands regularly. This was in agreement with that of the study carried out in Enugu State by Okoro, (2020), where he found that there is an overall high level of preventive practice towards the Corona virus disease which reflects the right measures to prevent the spread of the disease and that the measures practiced by the participants includes wearing face masks, hand washing, avoiding crowded places, and keeping a distance of at least 1meter away from people.

Section D: Factors influencing Covid 19 safety precautions practice among health workers

The findings of the study showed that several factors influences Covid 19 safety precautions practice among health workers in Ibadan North Local Government Area of Oyo State as 97(77.0%) of respondents affirmed

that lack of provision of use face mask at the hospital prevent you from using it during the Covid 19 outbreak, Larger number 85(67.5%) affirmed that lack of provision of hand gloves at the hospital prevent you from using it during the Covid 19 outbreak. This is in agreement with the study carried out by Corburn, Vlahov and Mberu, (2020); Akalu, Ayelign and Molla, (2020) at in Ethiopia and Kenya where it was revealed that there was poor adherence to safety precautionary measures against Covid-19 disease due to the inadequate availability of basic needs, such as water, drainage, waste collection, and ventilated housing, which leads to poor performance to apply precautionary measures.

Conclusion

Based on the results of this study, it was concluded that there was good attitude of health workers in health centres during and after Covid 19 outbreak in Ibadan North Local Government Area of Oyo State, as 8(76.3%) and 83(65.9%) of the respondents agreed and strongly agreed that they avoid touching anything at the health facility with bare hand during the Covid 19 outbreak. 19(15.1%) and 72(57.1%) agreed and strongly agreed that they disinfect all surface area after discharging patients from the wards. There is good behaviour of health workers towards Covid 19 safety precautions practice in Ibadan North Local Government Area of Oyo State as 77(61.1%) and 14(11.1%) of the respondents agreed and strongly agreed that they use face mask while going to work and while attending to patients in the hospital, only 35(27.8%) and 0(0.0%) agreed and strongly agreed that regular hand washing is tiresome to me, so they don't wash hands regularly. However, several factors influences Covid 19 safety precautions practice among health workers in Ibadan North Local Government Area of Oyo State as 97(77.0%) of respondents affirmed that lack of provision of use face mask at the hospital prevent you from using it during the Covid 19 outbreak, larger number 85(67.5%) affirmed that lack of provision of hand gloves at the hospital prevent you from using it during the Covid 19 outbreak. Thus, to support the good attitude and behavior of health workers during and after Covid 19, the Government of all levels should provide personal protective equipments to all health workers and/or subsidize the cost where cost must be cared for by them.

Recommendations

It is therefore recommended that;

1. Government Agency (Federal, State and Local Government Covid-19 Task Force) responsible for enforcing Covid-19 protocol adherence, should intensify more effort in ensuring that all traders follow the Covid-19 prevention protocol in order to effectively curb the spread of the disease.
2. All health care workers should ensure they effectively offer proper Health Education on Covid-19 related facts to all in the society.
3. Government authorities (Federal, State, and Local Government level) should ensure provision of appropriate Covid-19 preventive measure facilities in strategic places in the market and the society at large.
4. Non-Government Organization as well as Religious gather (Faith-based organizations) should be involved in the spread of the facts on Covid-19 and its preventive measures as well as set up facilities in their various organization so as to promote the control of the disease.

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