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COVID-19 PANDEMIC CRISIS AND THE CHALLENGES OF HEALTH SECTOR IN NIGERIA

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ABSTRACT

This study examined Covid-19 pandemic crisis and the challenges of health sector in Nigeria. Descriptive survey research design was used. Using simple random sampling technique, a total of 80 health workers comprised medical doctors, laboratory scientists, pharmacists and nurses participated in the questionnaire administration. The researcher developed Questionnaire tagged: Challenges of Health Sector Questionnaire (CHSQ) with reliability coefficient 0.89 was used for data collection. Descriptive statistics of mean and pie-chart were used for analyzing and presenting research questions 1 and 2. Research question 3 was analyzed using regression analysis. The findings revealed that poor health infrastructure, insufficient financial investment, inadequate sufficient health personnel, meager remuneration for health workers, poor leadership and management, shortage of personal protective equipment (PPE), inadequate personnel, under-equipped of laboratory and reduction in supply chain drugs were among the challenges facing health sector and its workforces in managing Covid-19 pandemic crisis. It was also found out that occupational safety of health sector workers is at risk during this pandemic period. Based on the findings, the study recommends among other things that Government at all levels in Nigeria need to increase the percentage of resources for the health in their annual budget, there is need for sincerity of purpose on the part of government for better welfare packages in terms of wages and salaries and others fringe benefits for front health workers curtaining the spread of Covid-19 in the country.

Keywords: Covid-19 Pandemic, Health Sector, Health Workers, Occupational Risk, Nigeria.

Introduction

There are having been series of concerns on the nature of health sector in Nigeria and stakeholders believed that the sustainability and viability of any country's economic and social growth depends on the healthcare sector. More reason health sector in Nigeria belongs to the concurrent legislative list which empowers the Federal, the State and the Local Governments to legislate on health matters. Health sector in Nigeria is determined to provide intensive, effective and efficient health care services to the people in order to allow them achieve laudable goals of health standard such that everyone will enjoy life at all levels of

human endeavor. Omoleke and Taleat (2017) were of the views that health sector's principal concern is the safety of lives and good health and decent environment. However, its activities involve governmental and non-governmental institutions in a multi-sectorial approach as well as individuals and groups for effective planning and implementation of health care delivery services in the country. The myriad of problems facing the Nigerian health care sector could be analyzed using the various levels of health care (the three tiers of health care) involved in health policy formulation, implementation and monitoring, that is, the Primary Health Care managed by the Local Government, the Secondary Care administered by the State Government and Tertiary Care under the control of the Federal Government.

The outbreak of novel corona virus disease (Covid-19) puts a spotlight on the resilience of health systems and countries' emergency preparedness and response. The rapid expansion of Covid-19 emphasizes the urgent need for a strong health workforce as an integral part of every resilient health system. Health workers are the backbone of the health system. Due to the nature of their profession, millions of them risk their own health doing their daily work. The health sector which is the epicenter of dealing with the virus has been the worst affected. The health systems, in many countries are overstretched as cases continue to rise. Even High-Income Counties have not been spared by the impact of Covid-19 especially in the health system. The impact of Covid-19 on developed nations reflected by the high numbers of infections and deaths demonstrates the fact that despite the perceived resilience of the health systems in these regions, they are still vulnerable to the spread and impact of Covid-19 (Etyang, 2020).

In Africa region with relatively weak health systems characterized by inadequate health personnel, inadequate equipment, inadequate budgets and a high burden of infectious diseases (such as TB, HIV, Malaria), it was expected that the continued spread of the corona virus would overburden the health systems in the region. On worst case scenario, it was predicted that most of the health systems would be overwhelmed and collapse due to the unprecedented spread of the virus (Nuwagira & Muzoora, 2020). Despite these challenges and the predictions, anecdotal evidence based on country specific interventions indicates that countries in the region have appeared quite resilient or somewhat immune to infections. The region has, however put in place stringent measures that include mandatory quarantine, curfews, closure of social and entertainment venues, closure of schools, encouragement of basic hygiene measures among other interventions (Nuwagira & Muzoora, 2020).

Meanwhile, Nigeria recorded it is first case of Covid-19 on 27th February 2020 when an Italian citizen in Lagos State tested positive for the virus. On March 9 2020, a second case of the virus was reported in Ewekoro, Ogun State a Nigerian citizen who had contacted with the Italian citizen (Nigeria Centre for Disease and Control, NCDC, 2020). As at 27th of August, 2020, a total of 53,021 cases of Covid-19 have been recorded in Nigeria with 40,280 cases discharged and 1,010 deaths. Lagos State still remained the epicenter of the pandemic in Nigeria; as at 27th of August 2020 with a total of 18,035 cases recorded out of which 15,227 cases recovered and 202 deaths. This was followed by Federal Capital Territory (FCT) with a total of 5,079 cases, 1,468 cases recovered and 50 deaths (Nigeria Centre for Disease and Control, NCDC, 2020). The outbreak of Covid-19 in Nigeria may have affected the health sector. According to Faisal, Jamil and Alauddin (2017), the inadequate programs designed to address the numerous health problems in Nigeria have led to the little improvement in our health status. Besides the

continued neglect of the importance of addressing health issues would make matters worse for poor Nigerians most of who are at the receiving end. The Nigerian health sector is currently facing significant challenges which include, among others an uncompleted agenda on the containment of infectious disease, as well as the rapid and on-ongoing emergence of non-communicable diseases. These multifaceted challenges are compounded by arisen economic policies and socio-political factors in the country history a limited institutional capacity to provide efficient responses at a population level (Faisal, Jamil & Alauddin, 2017).

Statement of the Problem

Nigerians are clamouring for better health systems in the country due to it is contributory impact on life style and health status. Despite it is significant, healthcare system in Nigeria seems to have virtually collapsed and in the state of comatose. What is worrisome is that a lot of resources has over the years been pumped into these systems yet not much is there for Nigerians to rejoice about in their health care services. The absence of modern facilities in many public hospitals is linked to failure of successive governments to pay adequate attention to the health sector. The federal allocation for the health sector is laughable in a country with no infrastructure to carry the most basic necessities such as steady power for hospital equipment (where available), good roads to transport patients to and from the hospitals, emergency medical service and personnel. The outbreak of Covid-19 in the country seems to have further exposes the nature of health sector in Nigeria. This study examined Covid-19 pandemic crisis and the challenges of health sector in Nigeria.

Objectives of the Study

The main objective of the study was to examine Covid-19 pandemic crisis and the challenges of health sector in Nigeria. In order to achieve the main objective of the study, the following specific objectives are listed:

1. To identify the challenges facing health sector in Nigeria during Covid-19 pandemic period.
2. To identify the challenges facing health sector workers in managing Covid-19 pandemic crisis in Nigeria.
3. To examine the impact of Covid-19 pandemic crisis on the occupational safety of health sector workers in Nigeria.

Research Questions

1. What are the challenges facing health sector in Nigeria during Covid-19 pandemic period?
2. What are the challenges facing health sector workers in managing Covid-19 pandemic crisis in Nigeria?
3. What are the impacts of Covid-19 pandemic crisis on the occupational safety of health sector workers in Nigeria?

Scope of the Study

This study was conducted in three (3) local government areas in Ogun State, Nigeria. The three local government areas are Ado-Odo Ota, Ikenne and Imeko Afon local government areas of Ogun State. They were selected ahead of the other local governments because they are the epicenter of the pandemic in the state. In terms of contents coverage, the challenges

facing health sector and workers during Covid-19 pandemic period and the impacts of Covid-19 pandemic crisis on the occupational safety of health sector workers were examined.

Review of Related Literature

Covid-19 Pandemic

Corona viruses are a family of viruses that can cause illnesses such as the common cold, severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). In 2019, a new corona virus was identified as the cause of a disease outbreak that originated in China. The virus is now known as the severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). The disease it causes is called corona virus disease 2019 (COVID-19). Public health groups, including the U.S. Centers for Disease Control and Prevention (CDC) and WHO, are monitoring the pandemic and posting updates on their websites. These groups have also issued recommendations for preventing and treating the illness (Yun & Wei, 2020). According to Yun and Wei (2020), signs and symptoms of corona virus disease 2019 (COVID-19) may appear two to 14 days after exposure. This time after exposure and before having symptoms is called the incubation period. Common signs and symptoms can include fever, cough and tiredness. Other symptoms can include shortness of breath or difficulty breathing, muscle aches, chills, sore throat, loss of taste or smell, headache and chest pain. This list is not all inclusive. Other less common symptoms have been reported, such as rash, nausea, vomiting and diarrhea. Children have similar symptoms to adults and generally have mild illness.

The severity of COVID-19 symptoms can range from very mild to severe. Some people may have only a few symptoms, and some people may have no symptoms at all. People who are older or who have existing chronic medical conditions, such as heart disease, lung disease, diabetes, severe obesity, chronic kidney or liver disease, or who have compromised immune systems may be at higher risk of serious illness. This is similar to what is seen with other respiratory illnesses, such as influenza (David & Emmanuel, 2020). According to them, infection with the new corona virus (severe acute respiratory syndrome corona virus 2, or SARS-CoV-2) causes corona virus disease 2019 (COVID-19). The virus appears to spread easily among people, and more continues to be discovered over time about how it spreads. Data has shown that it spreads from person to person among those in close contact (within about 6 feet, or 2 meters). The virus spreads by respiratory droplets released when someone with the virus coughs, sneezes or talks. These droplets can be inhaled or land in the mouth or nose of a person nearby. It can also spread if a person touches a surface with the virus on it and then touches his or her mouth, nose or eyes, although this isn't considered to be a main way it spreads (David & Emmanuel, 2020). David and Emmanuel (2020) asserted that the risk factors for COVID-19 appear to include recent travel from or residence in an area with ongoing community spread of COVID-19 as determined by CDC or WHO, close contact (within 6 feet, or 2 meters) with someone who has COVID-19 for more than 5 minutes or being coughed or sneezed on by an infected person. Although the most people with Covid-19 have mild to moderate symptoms, the disease can cause severe medical complications and lead to death in some people. Older adults or people with existing chronic medical conditions are at greater risk of becoming seriously ill with COVID-19. Complications can include pneumonia and trouble breathing, organ failure in several organs, heart problems, a severe lung condition that causes a low amount of oxygen to go through your bloodstream to your organs (acute respiratory distress syndrome), blood clots, acute kidney injury and additional viral and bacterial infections.

Although there is no vaccine available to prevent COVID-19, you can take steps to reduce your risk of infection. WHO and CDC recommend following these precautions for avoiding COVID-19 avoid large events and mass gatherings, avoid close contact (within about 6 feet, or 2 meters) with anyone who is sick or has symptoms, stay home as much as possible and keep distance between yourself and others (within about 6 feet, or 2 meters), especially if you have a higher risk of serious illness. Keep in mind some people may have COVID-19 and spread it to others, even if they don't have symptoms or don't know they have COVID-19, wash your hands often with soap and water for at least 20 seconds, or use an alcohol-based hand sanitizer that contains at least 60% alcohol, cover your face with a cloth face mask in public spaces, such as the grocery store, where it's difficult to avoid close contact with others, especially if you're in an area with ongoing community spread. Only use nonmedical cloth masks - surgical masks and N95 respirators should be reserved for health care providers, cover your mouth and nose with your elbow or a tissue when you cough or sneeze. Throw away the used tissue. Wash your hands right away. Avoid touching your eyes, nose and mouth, avoid sharing dishes, glasses, towels, bedding and other household items if you're sick, clean and disinfect high-touch surfaces, such as doorknobs, light switches, electronics and counters, daily. Stay home from work, school and public areas if you're sick, unless you're going to get medical care. Avoid public transportation, taxis and ride-sharing if you're sick.

Health Sector Challenges in Nigeria

The poor health status of a large percentage of people in Nigeria is widely known for years. Over the past decade, however, Nigeria health care crisis has received renewed attention because of the greater awareness of the militating factors and a greater understanding of the link between health and economic development (Lowel & Kamiya, 2010). The major factors that affect the overall contribution of the health system to economic growth and development in Nigeria according to Nwankwo (2011) include inter alia, lack of consumer awareness and participation, inadequate laboratory facilities, lack of basic infrastructure and equipment, poor human resource management, poor remuneration and motivation, lack of fair and sustainable health care financing, unequal and unjust economic and political relations between Nigeria and advanced countries, the neo-liberal economic policies of the Nigerian State, pervasive corruption, low government spending on health, high out-of-pocket expenditure on health, absence of integrated system for disease prevention, surveillance and treatment.

The majority of consumers are ignorant or unaware of available services and their rights regarding health service delivery mainly because of the absence of a bill of rights for consumers (claim holders) and providers (duty bearers). The role of the family in preventing and managing illness is also underestimated or inadequately supported by government programmes. It is now well known that interventions should be implemented through the health system as well as at the household level. The capacity of families and communities should be developed to increase awareness for meaningful participation in their health care and that of their children. In many states of Nigeria, most of the laboratories in the primary and secondary health care centres require some infrastructural upgrading to provide a safe, secure and appropriate working environment. Some basic health centre laboratories are better equipped than those in comprehensive health centers and some secondary level hospitals, but equipment was often minimal. Basic life-saving commodities are in short supply in most low income health systems. The Nigerian health system is characterized by inadequate and poorly

maintained health facilities, particularly at the PHC level. Poor state of infrastructure such as buildings, equipments, materials, and supplies and inequitable distribution of available facilities is the norm in many places. The drug system is plagued with out-of-stock syndrome. Fake, substandard, adulterated, and unaffordable drugs are prevalent across the country. Erratic supplies, non-availability of some basis essential and specialized drugs and other health supplies as a result of dependence on imported drugs are common.

Although human resources are no panacea for the poor health situation in any country, no health intervention can be successful without an effective workforce. Every country should, therefore, have a national workforce plan to build sustainable health systems to address national health needs. These plans should aim to provide access to every family to a motivated, skilled, and supported health worker. Over the years, poor remuneration of health workers have had an adverse effect on their morale such that over 21,000 Nigerian doctors are practicing abroad, while there is an acute shortage of physicians in Nigeria. Corruption has often manifested in Nigeria's health sector through the supply of fake drugs, substandard equipments, willful misdiagnosis of diseases, sharing of unallocated budget funds, inflation of contracts, diversion of drugs, favouritism in treatment and appointments based on political patronage. This has manifested in the lack of targeted efforts at outreach, health promotion and disease prevention activities designed to reach the people where they are. This has resulted in low immunization coverage, pre-natal care and screening. Public health, where it exists, is in a passive mode, with little activity designed to motivate people to change their behaviour or to adopt attitudes and practices that reduce their risk to disease (Ayara, 2011).

Empirical Review

Ozili (2020) examined covid-19 pandemic and economic crisis in Nigeria. The author used contents analysis and description. He found out that government responded to the crisis by providing financial assistance to businesses, not to households that were affected by the outbreak. The monetary authority adopted accommodative monetary policies and offered a targeted 3.5trillion loan support to some sectors. Whenayon, Odusanya and Joshi (2020) examined covid-19 outbreak situation in Nigeria and the need for effective engagement of community health workers for epidemic responses. Their findings revealed possible evidence of ongoing and increasing community transmission of covid-19 infections, inadequate testing capacity and overwhelming of health resources. They also revealed infection of several health workers in the face of existing critical skilled health workforce shortage.

Mohammed, Mohammed, Mohammed, Danimoh and Laima (2020) examined the risk perception and willingness of medical students in north east Nigeria to participate in mitigating Covid-19 pandemic. The study was a cross sectional study which studied 475 medical students from four medical colleges across the North Eastern region. Selected schools and classes were used to obtain information on the knowledge, perception and willingness to assist in providing health care services during this pandemic. Majority of the respondents had good knowledge and perception on Covid-19 (80.4% and 96% respectively). In addition, 78.3% of the respondents felt that they were at risk of becoming infected, however 93% of them stated that they were willing to assist in providing health care services during this pandemic. Parental disapproval and fear of becoming infected were the reasons given for those who were unwilling to be involved in provision of health care during this period. More male respondents (67.3%) were willing to participate in providing health care service during

the pandemic compared to 32.7% of females and this was statistically significant. This study has shown that majority of medical students in the North East have a good knowledge and perception on COVID 19 and are willing to assist in providing health services if needed during the Covid-19 pandemic. Yulong, Jiao, Zhizhong, Jiqiu and Yan (2020) explored the current development status and problems of health emergency management in China and provide a reference for improving, constructing, and implementing a public health emergency management system. Cases of major and severe public health emergencies in China were analyzed along with the relevant health emergency management literature from the last decade. China's health emergency system gradually improved during the study period. Monitoring and early warning systems were significantly strengthened. Material reserves and transfer management systems were constantly improved. However, the operational efficiency of command and decision systems was low, versatile talent accounted for a relatively small proportion, and emergency fund investment was insufficient.

Faisal, Jamil and Alauddin (2017) examined the major public health problems in Nigeria. They collected data through scientific database sources, web search engines, direct observation and relevant documents from the Nigerian Ministry of Health. The major public health challenges Nigeria faces are infectious diseases, control of vector some diseases, maternal mortality, infant mortality, poor sanitation and hygiene, disease surveillance, non-communicable diseases and road traffic injuries etcetera. Omoleke and Taleat (2017) examined the contemporary issues and challenges of the Nigerian health sector. It also attempted to identify the effect of the issues and challenges on the Nigerian citizens' health condition. They utilised primary data by interacting with randomly selected medical doctors, pharmacists, image scientists and nurses to elicit facts and information on issues, challenges and problems they experience in their hospitals. The findings of their experiences revealed that constellation of social, economic and environmental challenges are being experienced from hospitals, ranging from brain drain, poor remuneration, obsolete infrastructure, inadequate medical facilities and underfunding of the hospitals.

Research Method

The study used descriptive survey research design. The population of the study comprised health workers in Ado-Odo Ota, Ikenne and Imeko Afon local government areas of Ogun State. Using simple random sampling technique, a total of 80 health workers comprised medical doctors, laboratory scientists, pharmacists and nurses participated in the questionnaire administration. The researcher developed Questionnaire tagged: Challenges of Health Sector Questionnaire (CHSQ) with reliability coefficient 0.89 was used for data collection. Descriptive statistics of mean and pie-chart were used for analyzing and presenting research questions 1 and 2. Research question 3 was analyzed using regression analysis at .05 significance level.

Results and Discussion

Descriptive Analysis of the Research Questions

Research Question 1: What are the challenges facing health sector in Nigeria during Covid-19 pandemic period?

Table 1: Mean responses on the challenges facing health sector in Nigeria during Covid-19 pandemic period

s/n	Items raised	Mean
1.	Poor health infrastructure	3.152
2.	Insufficient financial investment	2.937
3.	Inadequate sufficient health personnel	2.683
4.	Meager remuneration for health workers	3.574
5.	Poor leadership and management	3.002

Source: Field Survey, 2020

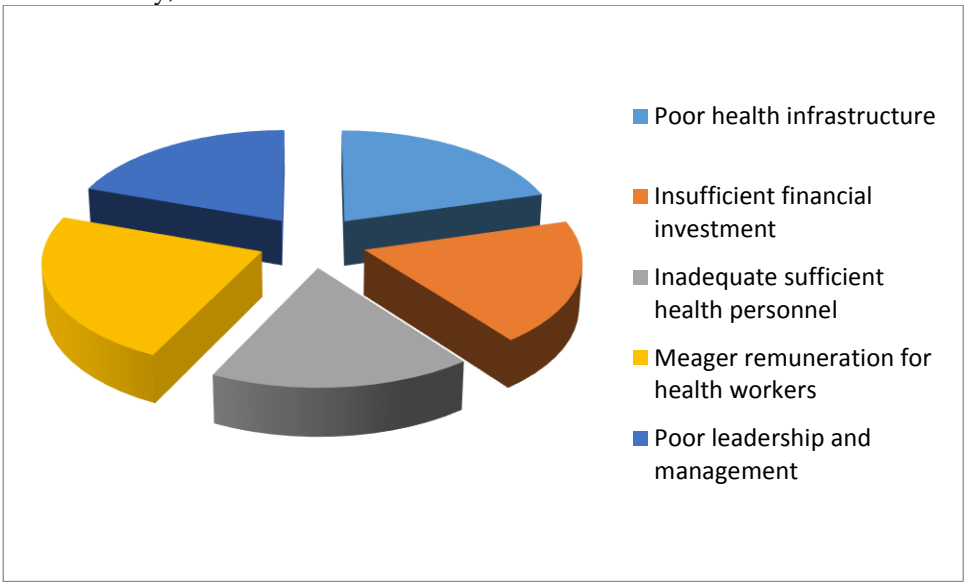

Figure 1: Pie-chart representing the challenges facing health sector in Nigeria during Covid-19 pandemic period

Based on the cut-off point of 2.50 (strongly agree (SA) 4, agree (A) 3, disagree (D) 2 and strongly disagree (SD 1). 4 + 3 + 2 + 1/4 = 2.5. Any mean scores equal to 2.50 or greater than 2.50 was regarded as agreed and less than 2.50 was disagreed. Table 1 revealed that poor health infrastructure, insufficient financial investment, inadequate sufficient health personnel, meager remuneration for health workers and poor leadership and management were among the challenges facing health sector in Nigeria during Covid-19 pandemic period.

Research Question 2: What are the challenges facing health sector workers in managing Covid-19 pandemic crisis in Nigeria?

Table 2: Mean responses on the challenges facing health sector workers in managing Covid-19 pandemic crisis in Nigeria

s/n	Items raised	Mean
1.	Shortage of personal protective equipment (PPE)	3.553
2.	Inadequate personnel welfare	3.782
3.	Under-equipped of laboratory	3.492
4.	Reduction in supply chain of drugs	3.032

Source: Field Survey, 2020

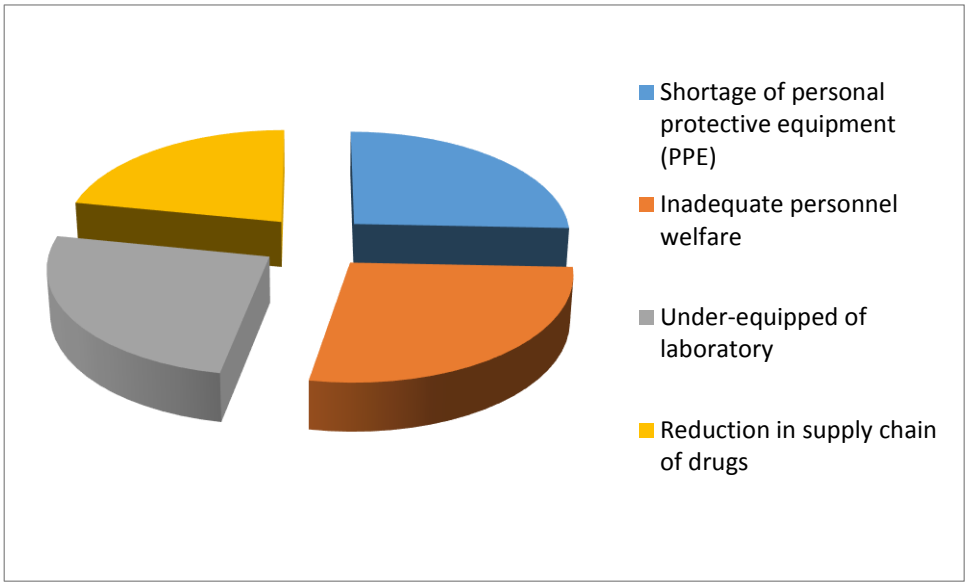

Figure 2: Pie-chart representing the challenges facing health sector workers in managing Covid-19 pandemic crisis in Nigeria

Table 2 indicated that shortage of personal protective equipment (PPE), inadequate personnel, under-equipped of laboratory and reduction in supply chain drugs were among the challenges facing health sector workers in managing Covid-19 pandemic crisis in Nigeria.

Research Question 3: What are the impacts of Covid-19 pandemic crisis on the occupational safety of health sector workers in Nigeria?

Table 3: Impacts of Covid-19 pandemic crisis on the occupational safety of health sector workers in Nigeria

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.233	.689		19.192	.000
	Covid-19 pandemic crisis	-.684	.039	.706	-17.728	.001

a. Dependent Variable: occupational safety

The first important thing to note in Table 3 is that the sign of the coefficient of Covid-19 pandemic crisis is negative. This implies that occupational safety of health sector workers is at risk during Covid-19 pandemic crisis. Furthermore, the probability ($p = 0.01$) as reported in Table 3 for Covid-19 pandemic crisis implies that the slope ($\boldsymbol{\beta} = 0.684$) is statistically significant. Hence, the researcher concluded that Covid-19 pandemic crisis may have been negatively impacted the occupational safety of health sector workers in Nigeria.

Discussion of Findings

The findings revealed that poor health infrastructure, insufficient financial investment, inadequate sufficient health personnel, meager remuneration for health workers and poor leadership and management were among the challenges facing health sector in Nigeria during Covid-19 pandemic period. The findings also indicated that shortage of personal protective equipment

(PPE), inadequate personnel, under-equipped of laboratory and reduction in supply chain drugs were among the challenges facing health sector workers in managing Covid-19 pandemic crisis in Nigeria and that, occupational safety of health sector workers is at risk during Covid-19 pandemic crisis. These findings was in commiserate with the work of Whenayon, Odusanya and Joshi (2020) who examined covid-19 outbreak situation in Nigeria and the need for effective engagement of community health workers for epidemic responses. Their findings revealed possible evidence of ongoing and increasing community transmission of covid-19 infections, inadequate testing capacity and overwhelming of health resources. They also revealed infection of several health workers in the face of existing critical skilled health workforce shortage. Faisal, Jamil and Alauddin (2017) stated that the major public health challenges Nigeria faces are infectious diseases, control of vector some diseases, maternal mortality, infant mortality, poor sanitation and hygiene, disease surveillance, non-communicable diseases and road traffic injuries etcetera. Omoleke and Taleat (2017) examined the contemporary issues and challenges of the Nigerian health sector. The findings of their experiences revealed that constellation of social, economic and environmental challenges are being experienced from hospitals, ranging from brain drain, poor remuneration, obsolete infrastructure, inadequate medical facilities and underfunding of the hospitals were among other challenges facing Nigeria health sector.

Conclusion and Recommendations

Conclusion

Before the outbreak of Covid-19 pandemic crisis in the world, Nigeria health sector has been facing series of challenges and this pandemic further showed the weakness of the sector. On that note, the following conclusions were drawn based on the findings of the study that poor health infrastructure, insufficient financial investment, inadequate sufficient health personnel, meager remuneration for health workers, poor leadership and management, shortage of personal protective equipment (PPE), inadequate personnel, under-equipped of laboratory and reduction in supply chain drugs were among the challenges facing health sector and its workforces in managing Covid-19 pandemic crisis in Nigeria and that, occupational safety of health sector workers is at risk during this pandemic period. Based on these findings, the following recommendations were provided:

1. There is need for provision of infection prevention and control practices, especially in healthcare facilities across all states in Nigeria.
2. Government at all levels in Nigeria need to increase the percentage of resources for the health in their annual budget.
3. There is need for sincerity of purpose on the part of government for better welfare packages in terms of wages and salaries and others fringe benefits for front health workers curtaining the spread of Covid-19 in the country.
4. There is need for adequate provision of personal protective equipment (PPE) for front health workers curtaining the spread of Covid-19 in the country.
5. Government need to employ more personnel in terms of medical doctors, laboratory scientists, pharmacists and nurses into our health sector to solve the challenges of inadequate manpower.

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