

**AWARENESS AND PERCEPTION OF EDUCATORS IN ENUGU ZONE ON
THE USE OF SOME ICT PLATFORMS: WHATSAPP, FACEBOOK AND
ZOOM IN DISSEMINATION OF INFORMATION ON COVID-19**

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Abstract

COVID-19 pandemic has grossly affected life in all ramifications. For education in Nigeria, it has been brought to a halt. Information and Communication Technology (ICT) is the difference. While measures are being set in place to re-strategize and re-adapt, it is pertinent to examine the use of ICT in the management of COVID-19 pandemic. Experts found that physical distancing, regular and adequate hand washing (with water and soap, or hand sanitizer), and correct use of face masks are notable preventive means for the control. Dissemination of information has only been made possible via the use of ICT platforms. This study examined the Awareness and Perception of Educators in Enugu Zone on the Use of Some ICT Platforms in this regard. ICT Platform Questionnaire (QICTPLA) of ten (10) items, face validated by three experts and trial - tested in Nsukka Zone, was used as instrument for data collection. Its reliability was found to be 0.88 using Cronbach Alpha from SPSS version 20. Multistage sampling technique was used from the 294 Government schools in Enugu State. Percentages (%) from MS Excel were used in analysing collected data. Awareness for the use of WhatsApp and Facebook in dissemination of information was 100%, 99.95%. For the use of zoom, awareness was 65%. The Educators' Perception on the use of WhatsApp, Facebook and zoom were respectively 89%, 72% and 49%. Challenges were poor electricity supply, high cost of data and poor

ICT skills acquisition. Training of Principals was recommended so that fairly Physical school may resume soonest.

Keywords: State Educators, ICT platforms, COVID-19.

Introduction

Life as we used to know it has in almost all ramifications, changed. The year 2020 would forever be remembered with the mantra – “stay at home, stay safe”. The COVID-19 pandemic grossly affected life as we used to know it; the way we live. The range is endless, from education to economy, agriculture, security, practice of religion etc. Broken into parts, ‘COVID-19’ stands for Corona Virus 2019, which represents the year it was first identified. COVID-19 is a Public Health Emergency of international concern. It is caused by the virus SARS-CoV-2, also referred to as 2019-nCoV, a novel virus of the Corona family of viruses. It was traced to a seafood market in Wuhan, a small town in China.

Much is yet to be known about this novel disease. However, its effect has been felt wide over, globally. Initially, it was thought to be a primarily respiratory disease, but has been shown to be a multi-systemic disease, affecting virtually all systems in the body – respiratory, cardiovascular, neurological, gastrointestinal systems etc. For instance, cases of stroke have been reported in COVID-19, to mention but one.

The World Health Organization (WHO) and its agency in different countries and regions of the world such as Nigeria Center for Disease Control (NCDC) have played significant roles in helping us understand and manage this novel disease. It has been shown to affect all races, ages, genders, though with some observed variations in progression and severity.

It is with the observed data that led experts to finding that some measures can limit its spread; including but not restricted to physical distancing, regular and adequate hand washing (with water and soap, or hand sanitizer), and correct use of face masks. These are notable preventive means for the control. The WHO (2020) found that the disease spreads through droplets of saliva or discharge from the nose, coughing in an open place or inside one’s palm. When an infected person touches a healthy person, spread can be on the increase. Therefore, preventive measures were taken to reduce physical contact. For instance, shaking of hands was put on a halt for the time being since prevention is better than cure.

One major landmark point in the ‘winning’ history against COVID-19 in Nigeria was shutting down some sectors of life, including shutting down physical schools. While this was a great winning stride against the virus, it largely affected life as we used to know it, especially as a people. It constituted a setback in every area of life.

For education at this time, in most parts of the world, particularly Nigeria, it was brought to a halt. However, this halt was largely physical. ICT (Information and Communication Technology) made the difference. While countries with the capacity took up alternative means of learning – largely online, countries like ours were at an absolute halt. ICT was the difference.

The role of ICT in the overall control of the COVID-19 pandemic cannot be overemphasized, both in the positive and negative lights. Information on COVID-19 were coming from many sources and dissemination of such information were made possible through the use of Information and Communication Technology (ICT) in form of Social media – WhatsApp, Facebook, Zoom meetings etc. Authentic messages coming from the Federal ministry of health, Nigerian Centre for Disease Control (NCDC) and World Health Organization (WHO) were sent to Educators such as Principals of schools. The Educators on social media share such information to reach others that are on the platform. Conferences and workshops were organized via live video calls such as zoom, facebook, whatsapp, email, offline messages, etc. The Principals were instructed by the supervisors to download such social media platforms and other software in their smart phones for dissemination of information to students, staff and entire community.

Preventive measures, actions needed and day-by-day situation of COVID-19 according to WHO (2020) are given in dashboard which presents daily counts of the virus. Confirmed number of cases, number recovered and death rates were reported on daily basis (NCDC, 2020).

It is important to note that while these positive effects were laudably noted, the negative impacts are also felt. The total number of confirmed cases was seen to be on increase day by day, month by month. This in no small measure causes fear and panic among people, as no one wants to die.

ICT has many definitions. Writing on information and communication technology (ICT), Onah, Amoke and Nwafor (2018) indicated that ICT is a major instrument of change in education and educators explore such to enrich instruction. Teachers,

students and the entire community at large regard information from Principals/State educators as reliable. Some common ICT platform common to them are WhatsApp, Facebook, Zoom.

Enugu state zonal educators are mainly secondary school principals and the members of the community regard information from these educators as coming from the right source, by being authentic and reliable. That is why it is said that principals represent governments in their respective schools (Onah, 2010). The way the educators perceive COVID-19 can greatly influence the entire state. ICT skills acquired by the educators especially on COVID-19 issues can help a lot in dissemination of timely information, which may cause havoc when delayed. It is on this ground that the researchers found the percentage awareness and perception of educators in Enugu zone on the use of some ICT platforms: WhatsApp, Facebook and Zoom, in the dissemination of information on COVID-19.

Solution on this issue is called for as Onah and Onyebuchi (2018) stated that in ICT programme for positive leadership, a positive leader as a role model, is well informed and needs to inform others rightly. No wonder the national slogan by NTI (2020) for teachers is "Great Teacher, Great Nation". Principals as both head teachers and state educators need to be aware of and

perceive positively the precautions measures set in place to control the spread of COVID-19 by using WhatsApp, facebook and zoom to disseminate information to the entire populace entrusted in their care and hence this work. One may at this juncture ask: what are the preventive measures on COVID-19 sent across to educators and others to be disseminated across the nation to control the spread of the pandemic? From WhatsApp messages, Facebook and Zoom conferences emanating from recognized health departments, WHO, NCDC and Federal Ministry of Health, ten (10) paramount messages on prevention of COVID-19 measures include : Washing of Hand with water and soap regularly; Avoid body contact like shaking of Hands/hugging one another; Wearing Facemask covering nose and mouth which also allows breathing in a crowd; Using hand sanitizer when it is not possible to wash hands with soap and water ; Avoiding Crowd and touching of infected person/objects; Maintaining social distancing thereby avoiding clustered gathering; Washing used Facemasks/used Clothes before reusing; Eating correct diet according to one's body system; Exercising one's body while at Home and Staying at Home when it is not necessary for one to go out

(NCDC, FMH, WHO; 2020). The above ten summarized measures were received from experts on different occasions. Receiving such information on COVID-19 and disseminating such messages were only made possible through ICT platforms due to lockdown which lead to closure of many physical organizations. It, therefore, becomes pertinent to explore how zonal educators representing the entire state principals utilize the ICT platforms so that school can return to its normalcy after COVID-19 pandemic.

Problem of the Study

Staying at home and Stay safe is good because a dead person cannot acquire knowledge. One needs education for development and progress. Staying at home without making effort on how to resume school has a problem of its own. Learners need to be informed so as to inform others aright. It therefore becomes necessary to find out how the educators disseminate information from expert on COVID-19 so that measures can be taken to avoid being infected. When this is done, school can take its normal course.

Purpose of the Study

The main purpose of this study is to ascertain the awareness and perception of educators in

Enugu zone on the use of some ICT platforms in dissemination of information on COVID-19. Specifically, the study sort to determine:

1. The awareness of educators on the use of: (a.) WhatsApp on dissemination of COVID-19 information. (b.) Facebook on dissemination of COVID-19 information (c.) Zoom on dissemination of COVID-19 information.
2. The perception of educators on the use of: (a.) WhatsApp on dissemination of COVID-19 information (b.) Facebook on dissemination of COVID-19 information. (c.) Zoom on dissemination of COVID-19 information.
3. The perception of educators on Challenges faced with the use of WhatsApp, Facebook and Zoom on dissemination of information on the ten measures of COVID-19 pandemic.

Research Questions:

1. What are the awareness of educators on the use of: (a.) WhatsApp on dissemination on COVID-19 information? (b.) Facebook on dissemination of dissemination of COVID-19 information? (c.) Zoom on dissemination of COVID-19 information?
2. What are the perception of educators on the use of : (a.) WhatsApp on dissemination of COVID-19 information? (b.) Facebook on dissemination of dissemination of COVID-19 information? (c.) Zoom on dissemination of COVID-19 information?
3. What are the perception of educators on Challenges faced with the use of WhatsApp, Facebook and Zoom on dissemination of information on ten measures of COVID-19 pandemic?

Literature Review on Covid-19 And ICT

Information and Communication Technology (ICT) according to Onah, Amoke and Nwafor (2018) is a major instrument of change as it affects Education. Knowledge is said to be Power and COVID-19 knowledge on strategies to be safe is called for to avoid untimely death. Ten (10) notable COVID-19 preventive measures include: Regular washing of Hands with water and soap; Avoiding shaking of Hands; Wearing breathable Facemasks that properly covers nose and mouth; Using Hand sanitizers when it is not possible to wash with water and soap; Avoiding Hugging of one another; Avoiding Crowd and touching of infected persons/ objects; Maintaining social distancing thereby avoiding clustered gathering; Washing used Facemasks/used Clothes before reusing; Eating correct diet according to one's body system; Exercising one's body while at Home and Staying at Home when it is not paramount for one to go out (NCDC, FMH, WHO; 2020). Some of such messages include: NCDC (2020; 14/05/2020) *Most people with COVID-19 may not show any signs but can still spread the disease. Protect yourself: stay 2 meters away from the next person and use a mask.* NCDC (2020; 19/05/2020) *advises - As you go about work or business, wear a face mask, wash your hands with soap and water, stay at least 2 meters away from another person, Take responsibility.* NCDC (2020; 21/05/2020) *stated that COVID-19 can affect anyone. People of all races, ages and economic status have been infected. Let us take responsibility to reduce the risk of infection.* According to NCDC (2020; 25/05/2020), *COVID19 is NOT the same as malaria. Both may present with fever and both diseases can come at the same time. PCR test effectively detects COVID-19 in patients.*

To show that some spread fake news during COVID-19 lockdown, NCDC (2020; 27/05/2020) stated that COVID-19 is REAL. So many of our health workers are risking their lives to protect the rest of us. Take responsibility, be supportive and stop spread of fake news. Also NCDC (2020; 03/06/2020), A facemask can spread disease if not handled properly. Take responsibility: wash your hands before and after wearing. Do not share and always wash before reusing.

NCDC (2020; 05/06/2020): it is important to remember that the COVID-19 cases reported by NCDC involve human beings like you. Do not wait to be a victim before taking action. Take responsibility today. NCDC (2020; 12/06/2020): Until scientists find a certified drug for COVID-19, let us all take responsibility by avoiding large gatherings to reduce the risk of being infected. NCDC (2020; 25/07/2020): COVID-19 spreads easily even by those showing no symptoms. When you hug, shake hands or share items with others, you risk being infected. Take responsibility. When there was ease of lockdown, the expert writes: NCDC (2020; 10/08/2020), Ease of lockdown does not mean that COVID-19 is over. Take responsibility, cover your nose/mouth with a mask, practice physical distancing and wash your hands often. Some of the messages sent by experts to educators also include: COVID-19 is real, stay safe.

Locking down of schools in the month of March and easing lockdown in August, 2020 may show sign of approaching reopening of schools and since it is still being reported that COVID-19 spread is on, it is necessary to prepare state educators on the best way to disseminate correct information to reduce the spread of the virus and also continue with normal school activities. It is also necessary to have a rethink on how information on COVID-19 spread were disseminated so as to make recommendations where necessary to enable timely and safe reopening of schools.

Conceptual/Theoretical Framework on ICT

Concept of ICT Platform: Without different ICT platforms no one will be aware when school is to be closed and when it is to be reopened platform is a place for somebody to express one's opinion publicly ICT platforms such as WhatsApp, Facebook and Zoom are mainly used to disseminate information on COVID-19. It involves the use of data in a network of computer. According to Onah and Obi (2016) computer networking involve using computer to communicate online in various ways such as email, social media platforms and the like. Each of the ICT platforms such as WhatsApp, Facebook and Zoom perform similar function which is basically communication but some are preferred to others depending on what

one wants. Zoom is preferred for meetings and conferences; WhatsApp number is restricted to fewer number of persons on a one-to-one bases while Facebook reach larger number of people. This is why Zoom is referred to as the leader in modern Enterprise video communications with an easy, reliable cloud platform for video webinars. While WhatsApp or Facebook videos covers only small number of audience, Zoom covers a larger number of participants where the presenter is viewed on the screen and heard by other participants provided video and audio facilities are on.

Methods

Research design used in this study was descriptive research design because educators' opinions were sought on the use of WhatsApp, Facebook and zoom in disseminating expert's messages on

COVID-19 pandemic. The population was made up 294 state educators. Multistage sampling techniques was used. The Enugu State's secondary school principals were categorized according to zones. There are six (6) education zones in the state namely: Agbani, Awgu, Enugu, Nsukka, Obollo-Afor and Udi zone with respective population of 45, 55, 31, 60, 49 and 54. Total for the entire State is therefore 294 (Ekte, 2020). Enugu zone was purposely selected for the study because of the caliber of its principals who are outspoken and can effectively represent the entire state. Nsukka zone, used for pilot test, was randomly selected from the remaining five zones before the actual study using balloting where one of the two research assistant picked yes for Nsukka zone. A structured questionnaire bearing the ten (10) items on preventive COVID-19 measures and also Ten Challenges encountered in using the stated ICT platforms are included in Information and Communication Technology Questionnaire (QICTPLA). The QICTPLA was used as instrument to collect data. Three experts ascertained the validity of the instrument which was trial tested and its reliability computed as 0.88 using Cronbach alpha. The questionnaire had Sections A, B and C. Four responses for each Section in a 4- point scale of Strongly Aware (4), Aware (3), Not Aware (2) and Strongly not aware(1) for A; Very High Perception(4), High Perception (3) , Low Perception (2) and Very Low Perception(1) for B. Strongly agree (4), Agree (3), Disagree (2), Strongly disagree (1) for part C. For each Section, Average of 2.5 (1+4/2) or 5/2 which corresponds to $\frac{1}{2}$ of 100 shows agreement in each case while below 2.5 or below 50% shows disagreement or low perception as the case may be. Therefore, Average of 2.5 or 50% and above shows High

Awareness, High Perception or High Challenge while below shows Low Awareness, Low Perception or Low Challenge on the ICT platform used.

Results

Research Question 1: What are the awareness of educators on the use of: (a.) WhatsApp on dissemination of COVID-19 information? (b.) Facebook on dissemination of dissemination of COVID-19 information? (c.) Zoom on dissemination of COVID-19 information?

TABLE 1

The awareness of educators on the use of: (a.) WhatsApp on dissemination of COVID-19 information. (b.) Facebook on dissemination of COVID-19 information. (c.) Zoom on dissemination of COVID-19 information.

	WHATSAPP			FACEBOOK			ZOOM	
Average	Percentage%	Remark	Average	Percentage%	Remark	Average	Percentage%	Remark
4.00	100%	High A	3.99	99.75%	High A	2.60	65%	High P

Table 1 above shows high Awareness of use of WhatsApp, Facebook and Zoom on dissemination of COVID-19 information as seen in the Percentage Awareness of 100%, 99.75% and 65%.

Research Question 2: What are the perception of educators on the use of : (a.) WhatsApp on dissemination of COVID-19 information? (b.) Facebook on dissemination of dissemination of COVID-19 information? (c.) Zoom on dissemination of COVID-19 information?

Table 2

The perception of educators on the use of: (a.) WhatsApp on dissemination of COVID-19 information (b.) Facebook on dissemination of COVID-19 information. (c.) Zoom on dissemination of COVID-19 information.

	WHATSAPP			FACEBOOK			ZOOM	
Average	Percentage%	Remark	Average	Percentage%	Remark	Average	Percentage%	Remark
3.40	85%	High P	2.88	72%	High P	1.96	49%	Low P

Table 2 above shows high Perception of use of WhatsApp and Facebook on dissemination of COVID-19 information as seen in the Percentage Perception of 85% and 72%. For Zoom, the Percentage Perception is 49% which is Low.

Research Question 3: What are the perception of educators on Challenges faced with the use of WhatsApp, Facebook and Zoom on dissemination of information on ten measures of COVID- 19 pandemic?

Table 3: The perception of educators on Challenges faced with the use of WhatsApp, Facebook and Zoom on dissemination of information on the ten measures of COVID-19 pandemic?

S/N	EDUCATORS' PERCEIVED CHALLENGES	Average	Percentage%	Remark
1	High cost of data for accessing the Internet.	1.80	45%	Low Chall.
2	Confusion on type of Mask to be worn to enable breathing,	3.44	86%	High Chall.
3	Inability to differentiate Online/Offline messages.	3.64	91%	High Chall.
4	Difficulties in avoiding some fearful messages.	3.16	79%	High Chall.
5	Fear of disseminating wrong Information.	3.24	81%	High Chall.
6	Poor knowledge of some WhatsApp terms in use.	2.88	72%	High Chall.
7	Poor knowledge of some Facebook terms in use.	3.12	78%	High Chall.
8	Poor knowledge of some Zoom terms in use.	3.32	83%	High Chall.
9	Poor ICT knowledge generally used in social media.	2.72	68%	High Chall.

10	Poor electricity supply which is always irregular.	3.80	95%	High Chall.
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Table 3 above shows High Challenge (High Chall.) in nine (9) items. Item one (1) bearing High cost of data to stay online was not a High challenge by the principals as seen in the Low average response of 1.80 corresponding to 45% which is below 50%. Some teachers and community members may see it as a challenge.

Discussion of Findings

The findings as represented in Table 1 revealed that the Educators' awareness for the use of WhatsApp Facebook and Zoom were respectively 100%, 99.75% and 65%. These results generally show High awareness. This finding is in line with that of Ugwuanyi , Onah and Ude (2018) who found out that online applications are seen in secondary schools. The Principals who are the educators that responded are aware that WhatsApp, Facebook and zoom are used in the dissemination of information on COVID-19 pandemic.

The findings seen in table 2 revealed that the Educators' perception on the use of ICT platforms:

WhatsApp, Facebook and Zoom were not as high as the awareness. The results were respectively 85%, 72% and 49%. The perception on the use of zoom was low. This is a problem because it is what the educators perceive that they can disseminate very well. This is in line with the findings of Onah and Agomuo (2016) that some lecturers do not utilize some online packages. One may ask: what are their reasons for reduced percentage perception especially on zoom?

The result presented in Table 3 answered the question especially when one considers the ten (10) COVID-19 preventive measures and the ten(10) Challenges the Educators encountered on the use of the selected ICT platforms in the dissemination of any information received on COVID-19. Generally, most of the challenges were caused by poor ICT skills and lack of constant supply of electricity. These problems were in line with Onah (2015) which stated that both online and offline multimedia projection packages are useful in dissemination of information but the problem of light caused by inadequate power supply of electricity is a hindrance. According to Onah, Ude and Obe (2017), the use of computer in teaching and learning cannot be overemphasized for no one can

cultivate effectively in a farm without farming implements. Technology had really revolutionized the world especially during this COVID-19 pandemic which is refusing to end completely.

Result presented in Table 3 show that the Educators encountered many challenges on the use of the stated ICT platforms while disseminating information on COVID-19 preventive measures. This finding is in agreement with Laudon and Laudon (2001) that training and retraining of personnel in different computer areas are needed for effective administrative purposes and other areas of life endeavours. Item one(1) bearing high cost of data to stay online was not a High challenge by the principal as seen in the Low average response of 1.80 corresponding to 45% which is below 50%. Although this was not a problem for the Educators, some teachers and community members may see it as a challenge because of economic imbalance of Nigerian citizens especially those residing in Enugu State (Onah, Ugwuanyi, Okeke, Nworgu, Agwagah, Ugwuanyi, Obe, Nwoye and Okeke (2020). The main challenges therefore are on acquiring the ICT skills needed for the Educators and the entire populace in the state. This is in line with Onah (2015) that e-learning subsets such as CAI, CAL, in ICT learning resources are needed for development and progress in this 21st century Education. No effective teaching of any sort can succeed in this period of COVID-19 without ICT platforms experienced via social media platforms such as WhatsApp, Facebook and Zoom.

Conclusion

Based on the findings of this study, the researchers concluded that Awareness and Perception of Educators on the Use of ICT Platforms in dissemination of information on COVID-19 were generally high for WhatsApp and Facebook but Zoom perception is a problem that needs immediate solution. Educators need to disseminate timely information. This would help to limit spread of the virus, and hence, avoid premature death.

Zoom platform allows for interactive approach in this regard. It is important to improve knowledge, raise awareness and teach educators the use of the Zoom platform, for the effective dissemination of information, especially COVID-19 related information.

Recommendation

The researchers, based on the findings, recommend the following on COVID-19 preventive measures:

1. Educators need to undergo ICT skill acquisition Training as soon as possible, for one can only disseminate information based on prior knowledge, awareness and perception.
2. Alternatives to sources of electricity such as Inverters and Generators should be supplied to every secondary school with fuel stipend to ensure full power outlet, which will in turn enable principals who have been trained spread information using ICT.
3. Terms used in WhatsApp, Facebook and Zoom should be properly explained to the principals in an organized zoom conference.
5. People who disseminate false information in the internet on COVID-19 should be sanctioned.
6. Sufficient allowance and complete materials should be given to doctors, educators/teachers and also to nurses/healthcare officers to equip them properly.
7. All the above ten COVID-19 preventive measures are to be adopted by all and sundry and constant announcement be made in all the zones in the state so as to ensure that only credible information is sent across to all and sundry and also timely.

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