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# Rural Extension Professionals' Knowledge, Preparedness and Perceived Barriers to Control/Reduce the Spread of Covid -19 Pandemic in Imo State, Nigeria

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## Abstract

The Covid - 19 pandemic has affected everything and everybody globally. Awareness and good attitude are key to adherence to preventive measures. This study seeks to ascertain extension officers' awareness of covid 19 pandemic, examine preparedness level and describe the challenges they face in trying to contain covid 19 pandemic spread. A total of 120 extension staff of Imo ADP was selected purposively for this study. Questionnaire was used to collect data and analysis done using percentages and mean. The results of the analysis showed that the respondents (100%) were fully aware of the Covid -19 pandemic outbreak. They are aware of the symptoms, transmission, incubation period, and protective measures (71.7%). They are really prepared to help as they have read several books and materials on Covid 19(77.5%) learnt to wear face mask (85%), regularly wash hands among other things. However, they face challenges such as inadequate trainings (M=3.01), low level of exposure (M=3.21), cultural beliefs of farmers (M=3.61), lack of affordable hand sanitizer(M=3.10),discomfort wearing mask(M=3,31), low level of education of farmers among other barriers. We recommend that both extension workers and farmers receive regular training and education, funds be made available to purchase necessary items needed for smooth extension work.

**Keywords:** Covid 19; Extension workers; Hand-wash; Cleaning; Protection

## Introduction

Governments, the nation over face various moves identified with moderating the disastrous wellbeing impacts and securing human lives, guaranteeing satisfactory food supply and the working of administrations to the neediest ones. Effect of COVID-19 pandemic the world over is rising each day and influencing the cultivating local area with the enormous exchange and financial disturbances. With regards to introduce interruptions and approaching dangers to the food production network, the COVID-19 episode has made limit weakness in the farming sector [1]. Hence, preparing every single accessible asset, associations and partners from both people in general and private areas and common society is fundamental to guarantee compelling and opportune reaction.

Rural Extension and Advisory Services (AEAS) assume a fundamental part at the cutting edge of the reaction to the pandemic in rustic agrarian regions. In any case, with the approach of inventive innovation scattering techniques, agrarian augmentation functionaries need to reconsider and modify their method of working quickly to react to the crisis setting inside the public authority guidelines [1].

The world is battling to battle the COVID-19 pandemic, particularly in every single non-industrial nation, similar to Nigeria, where the provincial populace may confront a double weight: absence of data and wellbeing administrations combined with neediness will open them to wellbeing hazards just as the lamentable financial results of the emergency. Then, the ranchers need to keep working in farming to guarantee their jobs as well as public and worldwide food supply and, thus, food security [2]. The effect of COVID-19 isn't uniform across the globe and every rural ware. Various systems and measures should be taken to protect food security and address bottlenecks along the food supply chains. While the disturbance in food supply chains for the most part concerns coordinations, work, transportation and promoting of transitory and new items because of limited versatility and lockdowns, the COVID-19 episode leaves the horticulture area in an amazingly tough spot that puts food supply at genuine danger for 2020 and past [2,3]. The current situation request solid institutional help to agribusiness and social changes in cleanliness, yet additionally in the selection of manageable methods of living to flourish in the circumstance. Since the expansion framework assists with willful social change among the networks it works with, powerful correspondence is currently more significant than any other time.

The battle against COVID-19 proceeds internationally, and to ensure a good outcome, individuals' adherence to preventive measures is fundamental. It is for the most part influenced by their mindfulness and readiness toward COVID-19. Information and mentalities toward irresistible infections are frequently connected with the degree of frenzy among the populace, which could additionally entangle the actions taken to forestall the spread of the illness. As "common perils are inescapable; the debacle isn't," [4] to work with the administration of the COVID-19 flare-up in Nigeria, there is an earnest need to comprehend the expansion laborers' mindfulness and readiness for COVID-19 during this difficult time. The current examination surveyed the mindfulness, readiness and hindrances toward COVID-19 among expansion staff.

Right now, there is no specific nor perceived treatment or powerful immunization accessible for COVID-19 aside from Azetreneca and non-pharmacological intercessions are being the best strategies to moderate the spread of COVID-19 [5] such, Agricultural Extension and Advisory Services Providers (AEASPs) assume a basic part in the counteraction and control of COVID-19 [6]. Their guiding practices are of crucial significance to improve the consciousness of patient ranchers and the local area about COVID-19 preventive estimates, for example, social separating, utilization of face covers and washing hands. Additionally, their insight and readiness in the administration of COVID-19 are imperative to forestall and control the spread of this irresistible sickness [7]. In Nigeria, great information and satisfactory readiness of AEASPs are extra significant in light of the fact that these abilities need to redress, even somewhat, for the all-around wasteful medical care framework. Along these lines, as the danger of COVID-19 develops, AEASPs' information, readiness, and the act of patient ranchers guiding about COVID-19 should be learned.

Therefore, this study aims to assess the knowledge, preparedness of AEASPs in relation to COVID-19 and to address the potential barriers and challenges for adequate prevention and control of COVID-19 in Imo State. The specific objectives are:

- To ascertain extension officers awareness of covid 19 pandemic.
- Examine covid 19 preparedness of extension staff.
- Ascertain barriers to effective reduction of covid 19 spread.

## Methodology

The study was carried out in Imo State of Nigeria. Imo State is located in the Southeastern zone of Nigeria and lies between latitude $4^0$ $45^o$N and $7^0$ 15 N and longitude $6^o$ 50E with land area of 5,530 km2. The population of the study consists of all 1,200 extension supervisors and extension field agents of Imo State ADP. Purposive random sampling technique was used in selecting the extension respondents for the study. A total of 120 extension officers was randomly selected Data collected with questionnaire were analyzed using descriptive statistics. This includes use of percentages presented in frequency distribution table to achieve all the objectives of the work.

## Results and Discussion

### Awareness of Covid - 19 symptoms, transmissions and complications

Table 1 showed that the respondents are fully aware of the symptoms, transmission of covid-19 pandemic. All (100%) of them have heard of covid-19 pandemic. They know how contagious and life threatening (77.5%) covid-19 could be. The common symptoms of fever, cough and tiredness (71.7%), incubation period of 2-14 days (82.5%) are know by them. Though During oral discussion with them, they said not all cough, fever could be signs of covid-19, but early check –up is vital. Transmission is human to human (74.2%), virus remains alive on surfaces for several hours (85.%), use of face mask (73.3%) showed the reality of covid-19 pandemic. The knowledge of the above prepares one to protect himself and stay safe. The respondents agreed to the fact that there is no known cure/vaccine (78.3%) as at the time of this study.

Older people are more at risk (67.5%), than the younger ones, and people with pneumonia, heart /kidney issues (75%) are more at risk as they could die quickly/faster than those who don't have. Awareness as a factor is very important in diseases management as it creates the consciousness in man that there is danger. This helps to protect oneself and other. Continuing, Tripathi et al., [8] said health organizations (89.6%) and healthcare professionals (57.9%) are able to communicate effectively to the participants in convincing and making them understand the patterns and phases of the infection. This study also revealed that some people showed little trust in social media and other sources of communications such as television, newspaper, posters, etc. It is spread via human-to-human transmission through droplet, fecooral, and direct contact and has an incubation period of 2–14 days (13). The majority of the participants (97.7%) mentioned human-to-human contact as the primary cause of COVID-19 transmission. They were aware that the infection is related to the respiratory system, and there could be some difficulties in breathing with high temperatures accompanied by dry cough. Furthermore, it might lead to pneumonia, organ failure, and death.

| Statement | *Percentages |
|---|---|
| Have you heard of covid-19 pandemic before | 100 |
| Covid-19 is a contagious life threatening disease | 77.5 |
| The common symptoms are fever, cough, tiredness etc | 71.7 |
| The incubation period is 2 -14 days | 82.5 |
| Common means of transmission is human to human | 74.2 |
| The virus remain alive on surfaces for hours or days | 85.0 |
| The is currently no vaccine to cure it now | 78.3 |
| Older people are mostly at risk | 67.5 |
| People with pneumonia, heart / kidney diseases die quickly | 75.0 |

*Multiple response

**Table 1:** Awareness of covid 19 symptoms, transmission and complications

### Extension workers covid-19 pandemic preparedness

Preparedness helps one face challenges with confidence, preparedness removes fear and failure. Table 2 revealed the preparedness of extension workers to delivery services during the time. The respondents said they could identify covid-19 pandemic signs (74.2%), have read materials on covid-19 (77.5%), can isolate themselves (75%), teach others the dangers of covid-19 (79.1%), and can use protective equipment (71.7). Any who does or is ready to observe the above is in fact prepared for the dangerous wave of the covid-19. Other facets of preparedness involves the use of face mask (85%), avoidance of hand shake (75.3), regular hard washing (75.3%), social distancing (67.5%), avoiding contact with the eyes (55.8%), maintaining food hygiene (82.5%) and avoiding unnecessary travels (50.8%) .

In a study in Saudi Arabia by Tripathi, et al., [8] it was found that over one-third of participants studied are well-prepared and adopt various methods for the current situation. The majority of participants stat that they avoid crowded places, mass gatherings, or traveling to suspected areas (95.1%), and 82.7% wear face masks when going outside and have increased the use of hand sanitizers and home cleaning materials. Many of them (76.8%) now spend 20 seconds washing their hands using soap multiple times a day. However, it could be assumed from the survey that a considerable percentage of the participants do not find the protective measures necessary, visit crowded places, and do not wear face masks when leaving home.

| Statement | *Percentage |
|---|---|
| I can manage common signs | 51.7 |
| I have rend materials conceding covid-19 | 77.5 |
| I know when to report covid-19 cases | 74.2 |
| I can isolate myself if symptoms are observed | 75.0 |
| I can help teach others on dangerous of covid -19 | 79.2 |
| I can use protective equipment | 71.7 |
| I avoid mass gathering | 50.8 |
| Using of face masks now | 85.0 |
| Avoidance of hand shake | 73.3 |
| Regular hand washing with soap | 78.3 |
| Maintaining social distance of 1-2 meters | 67.5 |
| Avoid touching of eyes, mouth, ear... | 55.8 |
| Covering of mouth while coughing now | 82.5 |
| I have attended covid-19 training/ workshops | 46.7 |
| Maintaining food hygiene<br>Stored foods/base requirements at home<br>I can identify covid 19 signs now | 82.5<br>67.5<br>72.5 |

*Multiple response

**Table 2:** Extension Workers Preparedness.

### Barriers to adequate reduction of covid-19 spread

Tables 3 showed that the respondents faced challenges in service delivering to clienteles. The challenges were lack of educational covid-19 programmes (M=3.20), inadequate training for extension professionals (M=3.01), lack of awareness among the public (M=3.24), insufficient knowledge among extension works (M=3.3), low level exposure of rural farmers (M=3.21), poor infrastructure (M=3.31), low level of literacy among farmers (M=3.50). During oral discussion with the respondents, it was observed that even members for protocol follow- up were not available. The local farmers need education and re-education to come terms with the reality of the pandemic.

Other barriers were cultural beliefs/doubts (M=3.61), inadequate financial resources (M=3.21) to handle purchase of materials, absence of proper hand sanitizers (M=3.10) discomfort in wearing face masks (M=3.31). The level of education of an individual helps in accepting ideas, making changes and thinking critically. Lack of education on the part of the farmers frustrated the efforts of the extension workers. In a study in Yemen Republic, Al-Ashwal, et al., [9] reported a range of barriers towards the adequate prevention and control of COVID-19 in Yemen. The most common one was the lack of awareness among the general population about COVID-19 preventive measures (89.1%) [10,11]. Other common perceived barriers included poor healthcare infrastructure (85.2%), an insufficient supply of personal protective equipment (PPE) (86%), lack of affordable hand sanitisers and facemasks for the public (83.9%), and inadequate financial resources for COVID-19 prevention and control (82.7%) [12,13]. Half of the participants perceived the weak performance of the local media in spreading the awareness of COVID-19 as a barrier.

| Statement | Mean | SD |
|---|---|---|
| Lack of educational covid-19 programmes | 3.20 | 0.81 |
| Inadequate training for excision professional | 3.01 | 0.57 |
| Lack of awareness among public population | 3.24 | 0.45 |
| Insufficient knowledge among extension workers | 3.31 | 0.74 |
| Poor infrastructure | 3.31 | 0.74 |
| Low level exposure of rural farmers | 3.42 | 0.47 |
| Low level of literacy among farmers | 3.50 | 0.61 |
| Cultural beliefs/doubts | 3.61 | 0.83 |
| Inadequate financial resources to handle covid-19 | 3.21 | 0.62 |
| Lack of affordable hand sanitizers | 3.10 | 0.58 |
| Discomfort of wearing face mask | 3.31 | 0.49 |

Mean accepted: 2.50

**Table 3:** Perceived Barriers to Reduce Covid 19 Spread.

## Conclusion

The consequences of this overview demonstrated that most of respondents knew about the information, preventive measures and solid and steady to battle against COVID 19. It was obvious that the local extension staff by and large are COVID-19 mindfulness and their readiness among extension workers were genuinely palatable. In any case, there was not much confusion in regards to the method of COVID-19 transmission among the members, which should be tended to [14]. Information and readiness do convert into improved practices toward COVID-19 counteraction and the equivalent was reflected in this investigation. To accomplish unlimited authority over COVID-19, it would likewise be advantageous to put resources into different COVID-19 counteraction endeavors, including wellbeing instruction and creative procedures dependent on nearby confirmations to raise the local area's mindfulness and to improve its deterrent practices.

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