COMPETENCY ASSESSMENT PROGRAMME OF HEALTH WORKERS IN COVID-19 ERA: A STRATEGY ROADMAP IN CONTROLLING THE SPREAD COVID 19 INFECTION AMONG HEALTH WORKERS NIGERIA

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The recent pandemic of COVID-19 infection (caused by the novel zoonotic SARS-COV-2 coronavirus) [1, 2] is ravaging the health force of most countries because of its momentum and mechanism of transmission has not been completely elucidated by world health organization (WHO). Since its emergence at Wuhan China the virus has rapidly evolved the entire world with about a million cases of infection as of 3rd April with both symptomatic and asymptomatic transmission causing pockets of the outbreak and increasing community transmission[3]. The implication of this menace on the healthforce,healthcare system and the society at large amidst this pandemic is worrisome, especially in a low resource setting,where there is a steady rise of infection among healthworkers. A competency assessment programme should be included as one of the strategy for containing the COVID19 infection as well as early identification of those at high risk and any other non-conformities,most especially in an environment where imprecision strive making it difficult to achieve precision.Competency of health workers if not properly assessed to ensure conformity to the established standard in the management of COVID19 infection in terms of ensuring adherence to Infection preventive control(IPC) measures and risk identification, which can become a non-conformity thereby promulgating the spread among health workers. Competency is the ability of a professional to apply their skills, knowledge, experience, and attitude to perform a particular task correctly while competency assessment is the documentation and observation of a professional to

ensure the task or duties are completed as required [4]. Despite the advocacy for personal hygiene(washing hand with alcohol base sanitizers), use of personal protective gear, appropriate investigation, social distance, isolation and treatment, there is still an upsurge of infection among health care workers.Recently the WHO said healthworkers account for about 10% of the infection globally,similarly United Nation reviewed that about 1.4million of haelthworkers are infected with COVID19 infection.Furthermore a recent stastistic has shown that about 10,000 healthworkers are said to be infected in Africa,with no fewer than 812 healthworkers in Nigeria testing positive to the virus. This is quiet alarming especially in a country where healthcare personnels is till a great challenge with a less than 30,000 doctors in a country with a population of 200million, putting it at a ratio of 1:6,600 of the population.It is logical to say that the rapid rise in COVID-19 infection among healthworkers is related with overwhelming population with the fast pattern of spread of the infection ranging from asymptomatic to symptomatic state in the population predisposes the overwhelming health facility and workers with the infection. This infection can further be exacerbated within the workforce if the competency of the staff is low in implementing infection prevention measures despite adequate training. At this junction, it is pertinent for us to differentiate between training and competency. Training is the development of skill, knowledge, and experience before performing a particular task while competency deals with the skills, knowledge, and experience acquired after training performed at specific intervals. What this means is that not all training eventually leads to competency. Hence, a competency assessment programme is needed to help in quantifying how much training as been translated to competency, as this will help to curb the transmission of infection among health workers and build public confidence with good clinical governance

It is therefore, necessary to do a mandatory competency assessment of our health workers after training to ensure quality and competency that is in keeping with the standard requirement of IPC. This step will help to reduce the risk of infection transmission, false negative and positive result and bridge the gap of non- conforming to appropriate IPC process which is gear at increasing the confidence of health workers and the public most especially in a low resource setting. Since competency comprises of both knowledge, skill, experience, and attitude. Using these four components, here are our opinion:

Knowledge: this is an important aspect of competency as it tends to assess how much a health worker knows about the disease condition and preventive measures. This will help to reduce the spread of infection among health workers and also reduce false omission   results.Going by the saying my people die because of lack of knowledge,allowing for ignorance.For instance, in a low resource setting where the use of personal protective equipments(PPE) is not a routine practice, talkless of availability,it paramount that the knowledge on the use of PPE be assessed before been used. Similarly with COVID19 pandemic where the need for a non waive testing facility with high specificity for confirmation of this infection,has lead to the prompt establishment of molecular laboratory for COVID-19 testing(PCR),thus are limited visa-vis the quality(adequate,competency,appropriate training etc) of personnel to man these facilities,if the personnel are not competent, despite adequate training this predisposes to instances of result uncertainty which can affect the control of infection, this was responsible for the upsurge of the infection and associated mortality in northern Nigeria(kano),with most of the healthcare workers infected within COVID-19,this prompted the National centre for disease control(NCDC) to close the laboratory and other activities for a while,thereby causing further spread. It is logical to say the

extent of containing the spreads of this infection among health workers is affected by the depth of the knowledge of this infection, especially in the advent that this is a new infection, whose pathogenesis has not been completely elucidated. Also, the knowledge base can affect the compliance to IPC and the processes involve in management, if the quality information, is not properly communicated by a competent individual from an authorized and accredited organization like WHO, this could pose a serious threat to health workers and loss of public confidence and this will somewhat promulgate the spread of the COVID-19. All these can be curbed via the introduction of a competency assessment programme, ensuring onsite evaluation and re-training in all the processes to evaluate proficiency testing and compliance with laydown procedures. Routine evaluation is equally encouraged.

Skill and Experience: this component of competency is crucial because the required skill and experience needed by the healthcare worker needs to be assessed due to the novelty of the infection,such as introduction of a non-waive testing(polymerase chain reaction) method. Healthcare workers require all the necessary skill on sample collection(Nasal swab, bronchial alveolar lavage),analysis as this is not a routine practice in this part of the world, furthermore the required skill on how to wear, remove and dispose of PPE,as amidst this pandemic.Therefore, there is a need for healthcare workers to demonstrate their skills and proficiency which shall be assessed , especially in low resource settings. The skill and experience of health workers can also be assessed by checking their previous records, and other acquired skill on infection control, as this can help to contain the spread of the infection.

Attitude: attitude is a vital component of competency it serves as the fulcrum in ensuring competency with conformity to the applied rules. This is very important despite the knowledge and skill. If the attitude which entails the commitment and

behavior of health worker towards the control of COVID19 infection.Negative attitudes of health worker, can be a danger sign. Motivation and incentives are needed to positively reinforce the attitude of health workers toward conforming towards COVID-19 infection prevention measures and paramount to this is to discourage negative attitude and those who solely think of remuneration without committment are less conscious of there health. Therefore, it is pertinent to involve health workers with a positive attitude towards their work, focused, dedicated and disciplined to minimize the transmission of infection. This can be assessed by record check, interview, and regular observation.

Summary

The rate of COVID-19 infection among health worker poses a great challenge to this workforce who are at the frontline for containing this infection the paradox here is that the mode of transmission of this infection has not been completely demystified with so much uncertainty, A competency assessment programme is needed to ensure compliance with the required infection prevention control thereby containing the spread of COVID-19 among health workers and the entire public.

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APPENDIX

CONSISE COMPETENCY ASSESSMENT PROGRAMME TOOL FOR COVID-19 IN LOW RESOURCE SETTINGS

		Schedule	SCORE

Assessment Method	Area of Competency (Process, Procedure, Method or Analyte)		1	2	3	4	5
Direct observation	Knowledge • Pre-test • Post-test Skill • How to wear PPE • How to remove PPE • Hand washing • Sample collection Attitude • Dedication • Discipline • Focus						
Monitoring	• The routine practice of social distance • Regular hand washing • Use of face mask • Avoidance of social gathering • Handling of samples						
Assessement of previous activities	Known sample Proficiency testing Review of previous activities - (Sample collection, testing, result, and documentation)						
Assessement of problem solving skills	How to trouble shoot Use of Quiz/scenario						

Scoring system

<2 – NC (non compliance)

2-3 – PC (Partial compliance)

4-5 – FC (Full compliance)