

# **Report on Outreaches Organised by ACE\_PUTOR**

**REPORT ON THE WORLD BANK AFRICAN CENTRE OF EXCELLENCE IN  
PUBLIC HEALTH AND TOXICOLOGICAL RESEARCH PARTICIPATION IN THE  
2019 INTERNATIONAL LEAD POISONING PREVENTION WEEK OF ACTION  
HELD FROM 20 TO 26 OCTOBER 2019**

**BY**

**Igbiri Sorbari.**

## **Introduction**

International Lead Poisoning Prevention Week (ILPPW) raises awareness and promotes actions to address the human health effects of lead exposure, especially for children. During the Week, governments, academia, industry and civil society advance efforts to prevent childhood lead poisoning, and specifically laws to eliminate lead in paint.

The aims of the 2019 ILPPW were to:

- Raise awareness about health effects of lead poisoning;
- Highlight countries and partners' efforts to prevent particularly childhood lead poisoning; and
- Urge further action to eliminate lead paint through regulatory action at country level.

## **Centre Participant:**

- |                        |                      |
|------------------------|----------------------|
| ➤ Dr. Daprim Ogaji     | Centre Leader        |
| ➤ Prof. Best Ordinioha | Professor, ACE-PUTOR |
| ➤ Igbiri Sorbari       | Doctoral Student     |

## **Activity:**

**Type:** Live radio program at

**Venue:** 95.9 cool FM Port Harcourt at KM16 East-West Rd, Rumuosi, Port Harcourt.

**Date/Time:** 22<sup>nd</sup> October, 2019/ 10: 00 – 10: 15 am

**Content:** The participants highlighted

- The significance of the Week of Action,
- The health effect of lead poisoning,
- Previous lead poisoning cases in Nigeria
- Exposure of children to lead
- And the need for banning lead based paint in Nigeria.

- Further explained was the absence of any form of regulation on lead based paint.

The program concluded with a charge on Government, the academia and all actors to make deliberate efforts aimed at banning lead based paint and other forms of exposure while charging health care professionals to increase monitoring of blood lead levels.



Mr Confidence Igwe  
Head, Admin



## **REPORT ON A ONE-DAY SENSITIZATION FORUM ON LASSA FEVER AND NOVEL CORONAVIRUS HELD ON TUESDAY 11<sup>TH</sup> FEBRUARY, 2020**

### **Preamble**

Following the recent outbreak of Lassa fever and coronavirus, the Vice-Chancellor, Prof. Ndowa E. S. Lale and the University Management decided to organize a one-day sensitization forum on Lassa fever and novel coronavirus to sensitize the University Community and the general public on the recent outbreak.

The event was anchored by African Centre of Excellence, Centre for Public Health and Toxicological Research (PUTOR) in collaboration with School of Public Health (SPH) and Faculty of Science as directed by the Vice-Chancellor.

### **Methodology**

In a bid to invite the University Community and the general public as directed by the Vice-Chancellor, the African Centre of Excellence, Centre for Public Health and Toxicological Research (ACE-PUTOR) in collaboration with School of Public Health (SPH) and Faculty of Science produced banners, flyers, etc. for the one-day sensitization forum on the recent outbreak of Lassa fever and coronavirus.

### **Event**

The one-day sensitization forum on Lassa fever and novel coronavirus was held on Tuesday 11<sup>th</sup> February, 2020 at Ebitimi Banigo Auditorium, University of Port Harcourt.

The Vice-Chancellor, Prof. Ndowa E. S. Lale who was the Chief host declared the event open.

The event was well attended by the University Management, Deans, HODs, students, staff and stakeholders.

Four hundred and fifty-one (451) were in attendance.

The event also featured some speakers from different background and a panelist.

They include:

Dr. Omosivie Maduka, Consultant Epidemiologist UPTH

Dr. Golden Owhonda, Director Public Health and Disease Control, RS-MOH

Dr. Datonye Alasia, Consultant Infectious Disease/Respiratory Physician, UPTH

Dr. Chinwe Ezirim, Health Services Dept. Uniport.

It was discussed that Lassa fever is a viral illness that typically occurs in West Africa and that The Lassa virus is transmitted to humans mainly through handling rats, food or household items contaminated by rats' urine and faeces. The virus can spread between people through direct contact with the body fluids of a person infected with Lassa fever, as well as contaminated bedding and clothing.

It was also agreed that one cannot get Lassa fever through hugging, shaking hands or sitting near someone.

### **Event Picture**

Group pictures were taken immediately after the event with the Vice-Chancellor as well as other pictures during the event.

The pictures are been stored in a CD and kept in PUTOR archive for record purpose.

### **Members of the Organising Committee**

- |                                       |   |           |
|---------------------------------------|---|-----------|
| 1. Dr. Kingsley Patrick-Iwuanyanwu    | - | Chairman  |
| 2. Dr. (Mrs.) Ojule                   | - | Member    |
| 3. Dr. Frances Anacletus              | - | "         |
| 4. Mr. Williams Wodi                  | - | "         |
| 5. Mrs. Anthonet Ndidiamaka Ezejiofor | - | "         |
| 6. Dr. Faith Diorgu                   | - | "         |
| 7. Dr. Catherine Ikewuchi             | - | "         |
| 8. Mr. Confidence Igwe                | - | Secretary |



Confidence Igwe  
Principal Assistant Registrar



## **REPORT ON A PUBLIC SYMPOSIUM ON SURVIVING VIRAL PANDEMICS IN RESOURCE-CHALLENGED ECONOMIES: THE PLACE OF PLANT-BASED DIETARY REMEDIES**

### **PREAMBLE**

The African Centre of Excellence in Public Health and Toxicological Research (ACE-PUTOR) in collaboration with the Nutrition and Food Safety and wholesomeness Prevention, Education and Research Network (NOODLES), Italy with approval from the University Management organized a one-day public symposium on surviving viral pandemics in Resource-Challenged Economies: the place of plant-based dietary remedies. The event was held on Tuesday 4<sup>th</sup> May, 2021 at Ebitimi Banigo Auditorium, University Park, University of Port Harcourt.

### **METHODOLOGY**

As part of the Centre's mission to provide a platform to congregate highly skilled human resource both within and outside the University, build a robust resource of highly skilled and motivated public health professionals who are equipped with current knowledge, skills and competencies, the Centre organized three of its PhD students as resource persons who gave a public symposium on four different areas of the place of plant-based dietary remedies.

These includes:

1. Food substances and viruses
2. Plant-derived food grade substances that are active against respiratory viruses.
3. Nutritional remedies for covid-19
4. Dietary quercetin as potential therapy against covid-19.

### **SYMPOSIUM**

The one-day symposium was well attended by the Ag. Vice-Chancellor, Prof. Stephen Okodudu ably represented by the Academic Coordinator of the University Prof. A. Kilani and other Principal Officers as well as staff and students.

The Centre Leader, Dr. Daprim S. Ogaji in his opening remarks welcomed the Ag. Vice-Chancellor and others present both on site and online. He gave a brief background on the reason the Centre organized the one-day symposium with the focus on the possibility of preventing,

treating or managing covid-19 and other viral pandemics through deliberate consumption of plant-based diets that are rich in anti-viral constituents by those infected.

He informed the public that the world had faced several pandemics and is currently battling the covid-19 pandemic which has claimed over 3million lives so far across the world. He informed the public that global efforts are currently focused on the development of drugs and effective vaccines against covid-19.

He informed the public that the symposium would highlight evidence on the therapeutic potencies of different constituents of plant-based diets against different viruses such as respiratory viruses and coronaviruses. He also informed the public that the Centre is willing to play a major part, in fulfilment of their core mandate as a Centre of Excellence in Public Health and Toxicological Research. He further explained that the overall goal of this symposium is to raise people's consciousness on the therapeutic potencies of the constituents of common plant-based diets against viruses.

The resource persons who are ACE-PUTOR PhD students presented the evidence syntheses as follows:

### **FOOD SUBSTANCES AND VIRUSES**

Dr. Benson Ephraim-Emmanuel in his presentation informed the public that over the years, a good number of viruses have been in plated as causative agents of various organ systems in man. He went on to say that the various organ systems in the human body can be affected by diseases caused by viruses which have resulted in outbreaks, morbidities and mortalities in human populations. He said that certain factors continue to pose challenges to the provision of effective and durable antiviral agents to tackle this problem and that these include high viral mutation rates, the development of resistance etc.

He further explained that these have continually propelled scientists to delve into the science of identifying natural sources useful in inhibiting viral infections. He informed the public that during research, it has been found out that a weakened immune response is associated with inadequate nutrition and food substances which can provide both indirect and direct antiviral actions. He said that the indirect action involves strengthening the body immune system to be capable of clearing the virus and the direct action involves interaction or interruption of the various kinds of the viral life cycle including viral entry, viral attachment and internalization, replication and other viral protein activities as well as the assembly and shedding of the virus.

He explained that direct action also involves enhancement of antiviral immune responses of the body and the suppression of virus-induced cytotoxicity and that these antiviral effects of plants are attributable to active biochemical constituents of the plants including flavonoids, terpenoids, vitamins C and D, micronutrients, quercetins, anthocyanidins etc.

Dr. Benson Ephraim-Emmanuel concluded his presentation by saying that it is apparent that a healthy, balanced diet can offer the necessary macro and micronutrients, prebiotics, probiotics and symbiotics that can restore and maintain immune cell functions of the body. He further advised that a return to our native fruit and vegetable rich diets in both food and drink forms on a regular basis is recommended for effective antimicrobial action and healthy living.

## **2. PLANT-DERIVED FOOD GRADE SUBSTANCES THAT ARE ACTIVE AGAINST RESPIRATORY VIRUSES**

Dr. Francis Umeoguaju in his presentation informed the public that respiratory viruses are viruses that infect the human respiratory tracks and that common example of this group of these viruses include the influenza virus, the rhinoviruses, the respiratory syncytial viruses, the coronaviruses, etc. He further explained that these viruses are responsible for several cases of yearly infections and mortalities for instance, the influenza virus infects over 20% of the world's population annually and results in over 500,000 of yearly mortality. He informed the public that respiratory viral infections are present with symptoms that includes sore throats, runny or stuffy nose, headaches, muscle aches, fatigues, feverish feelings, pneumonia, prolonged cough, sneezing, etc.

He further informed the public that the evidence identified from scientific literature shows that some functional constituents of plant-based diet such as the polyphenols, flavonoids, phenolic acids, lectins, curcumin, vitamin D, certain plant glycosides as well as some dietary beverages such as the guava tea, hibiscus sabdariffa (zobo), green tea, black tea are able to inhibit some respiratory viruses in test tube experiments as well as protect laboratory animals from cellular damages and mortalities caused by respiratory viruses.

He informed the public that these viruses prevent viral ability to infect new host cells by directly interacting with viral surface coats and host cell receptors and that they are also able to prevent the production and release of more viruses into host cellular environments and stimulate the productions of effective immune responses against respiratory virus as well as suppress respiratory virus-induced inflammatory damages in infected cells.

Dr. Francis Umeoguaju concluded by saying that based on the highlighted evidence from non-human studies, he recommended the increased consumptions of food that are rich in these plant-derived anti-respiratory viral substances, as a dietary strategy to suppress and manage respiratory viral infections.

### **NUTRITIONAL REMEDIES FOR COVID-19**

Dr. Joy Uba in her presentation informed the public that the coronavirus disease 2019 (Covid-19) is caused by the severe acute respiratory syndrome (SARS), coronavirus 2 (SARS-cov2) is currently ravaging the world with mortality exceeding 3 million persons worldwide. She further explained that SARS-cov2 gets into host cells following successful interaction between SARS-cov2 spike protein and angiotensin converting enzyme 2 (ACE2) expressed on host cells and that following successful invasion of host cell, SARS-cov2 subsequently utilizes host replication and protein synthesis machineries to produce multiple copies of its progeny viruses.

She informed the public that the pathological features of covid-19 infection include excessive inflammatory damage to the human respiratory track which subsequently leads to breathing difficulty and other respiratory disorders. She further explained that this review assessed available evidence to identify dietary substances that has potentials to suppress SARS-COV2 life cycle as well as prevent SARS-COV2 related morbidities.

She informed the public that the literature review identified probiotics, micronutrients which includes vitamin C, vitamin D, selenium and zinc, essential oil and certain dietary phytochemicals, as having great prospects for application in covid-19 management. She further explained that these probiotics enhances innate immune responses against viruses as well as suppresses virus induced systematic inflammation by down regulating interlinking expression.

She informed the public that zinc interferes with viral life cycle also enhances the production of interferons, selenium, vitamin A and vitamin C can suppress virus-induced oxidative damages.

She further explained that phytochemicals such as glycyrrhizin which is from licorice, lycorine which is from onions and garlic, polyphenols which is from fruits and vegetables, resveratrol which is from groundnut, grapes, curcumin which turmeric, also interferes with different stages of SARS-COV2 life cycle. She informed the public that essential oils from eucalyptus and garlic have also been demonstrated to be capable of inhibiting critical SAR-COV2 PROTEINS.

Dr. Joy Uba having presented the above nutritional remedies for covid-19, recommends that a multi-targeted approach to covid-19 prevention and management through the deliberate



consumption of diets which are rich in antioxidants, immune boosting, anti-inflammatory and antiviral constituents will help or serve as nutritional remedies for covid-19.

### **DIETARY QUERCETIN AS POTENTIAL THERAPY AGAINST COVID-19**

Dr Francis Umeoguaju in his presentation informed the public that the world is currently battling with covid-19 pandemic which had led to over 3 million worldwide death in less than 2 years of the covid-19 pandemic and that covid-19 are caused by SAR-COV2 viruses and these SAR-COV2 belongs to the family of coronaviruses and has about 70% similarity with the genes of earlier MERS and SARS-COV strains of coronaviruses.

He further explained that the evidence obtained from test tube experiments and computational analyses of coronavirus surface coat and host surface receptors showed that quercetin can suppress coronavirus proliferation and pathologies in host cells. He informed the public that this can prevent a successful infection of a new host cells by the coronavirus and that quercetin is also able to directly inhibit critical viral proteins such as SARS and MERS COV 3clao and Pipro, SARS-COVNTpase/helicase that function in the production of new viral genome. This effectively suppresses the production of new infective coronaviruses in infected host. Quercetin has been shown to possess potent antioxidants and anti-inflammatory properties in many test-tube and animal studies. He further explained that the species and experimental model differences may also present some challenges but that despite these limitations, quercetin holds some promise in suppressing the pathogenesis if covid-19 infection in humans and some clinical studies are under way to ascertain the potency of quercetin amongst covid-19 patients.

In conclusion, Dr. Francis Umeoguaju informed the public that quercetin is particularly abundant in onions, apple, moringa leaves, pepper, cowpea and sweet potato leaves. He further explained that increased intake of quercetin rich food may offer additional therapeutic strategies against covid-19 infection.

### **EXPECTED OUTCOME AFTER THE SYMPOSIUM**

The Centre and the Nutrition and Food Safety and Wholesomeness (NOODLES) sees the important deliverable from this symposium as the evolution of a multidisciplinary collaboration involving the faculties of Services, Agriculture, Pharmacy, Basic Medical Sciences and Clinical Sciences of the University and the Community of our sister institution.

This multidisciplinary team will validate existing evidence and research into innovative ways in which these plant-based antiviral constituents can be extracted, enriched, and utilized in a

manner as to increase our stockpiles of effective home-grown antiviral therapies against current and future viral pandemics.



**Confidence Igwe**

**Admin Head/Desk Officer**

**REPORT OF THE COMMUNITY HEALTH OUTREACH CARRIED OUT BY THE AFRICAN CENTRE OF EXCELLENCE IN PUBLIC HEALTH AND TOXICOLOGICAL RESEARCH (ACE-PUTOR) IN PARTNERSHIP WITH THE DEPARTMENT OF COMMUNITY MEDICINE, UPTH AND THE MEDICAL WOMEN ASSOCIATION OF NIGERIA (MWAN), RIVERS STATE BRANCH WHICH HELD ON THE 16<sup>TH</sup> AND 17<sup>TH</sup> FEBRUARY, 2022 AT THE ALUU PRIMARY HEALTH CARE CENTRE**

**INTRODUCTION**

Primary Health Care is critical for community members' health, as it ensures that individuals and groups receive all of the treatment they require within their community. In a bid to bring healthcare closer to the people, a two-day health outreach was planned for the three host communities of the Primary Health Center Aluu which are Omuoko, Umuhechi and Omuokiri. This health outreach was held on the 16th and 17th of February, 2022 in the premises of the health centre.

**PRELIMINARY ACTIVITIES**

Planning for the health outreach involved the following activities:

- Preparation of a budget for the 2 day outreach
- Sending of letters to the paramount rulers of the 3 host communities
- Sending of letters to churches of the host communities to intimate them of the outreach
- Liaising with other stakeholders – MWAN Rivers, Department of Community Medicine, UPTH, Community Health Officers Programme to understand roles and responsibilities of each stakeholder
- Leveraging on the Community Health Officers Programme on health assessment in the host communities to aid publicity
- Request for more personnel from the haematology department and community medicine departments to support the outreach
- Assessment of the needs of the health centre for possible intervention

**OUTREACH ACTIVITIES**

The outreach took place on the 16th and 17th of February 2022 at the Primary Health Centre in Aluu. Prof. Daprim Ogaji, the ACE-PUTOR centre leader, did the flag off, declaring it open in the presence of ACE-PUTOR personnel, PHC Aluu staff, MWAN Rivers Representatives, and community leaders.



*Figure 1: ACE-PUTOR Centre Leader (3<sup>rd</sup> from Left) with Community Leader (2<sup>nd</sup> from Left)*



*Figure 2: ACE-PUTOR center leader declaring the outreach open*

The outreach had the following services:

1. Health talks
2. Free medical care/health screening

3. Laboratory tests
4. Eye/Ear checks
5. Free cervical cancer screening
6. COVID vaccination services
7. Family planning services

## OUTREACH STATISTICS

340 community members were seen during the outreach. 113 for Day 1 and 227 for Day 2.

Common ailments seen for adults were malaria/plasmodiasis and chronic conditions such as hypertension and joint pains, while that for children was mainly upper respiratory tract infection characterized by common complaints of cough and catarrh.

*Table 1: Table showing the statistics for the two-day outreach*

	DAY 1	DAY 2	TOTAL
<b>SEX</b>			
MALE	31	71	102
FEMALE	82	156	238
<b>AGE</b>			
ADULTS (>18 Years)	80	123	203
CHILDREN (<18 Years)	33	104	137
<b>FAMILY PLANNING SERVICES</b>	8	16	24
<b>COVID-19 VACCINES</b>			
- 1 <sup>st</sup> Dose	6	15	21
- 2 <sup>nd</sup> Dose	7	10	17
<b>LABORATORY SCREENING</b>			
- Total HIV Screening done	101	132	233
- Total number of HIV positives*	6	5	11
<i>*Positives were referred for continuation of care</i>			

- Total Malaria RDT test done	50	49	99
- Total Malaria RDT positives	3	16	19
<b>CERVICAL CANCER SCREENING</b>			
- Total women screened	12	23	35
- Suspicious lesions found*	4	1	5
<i>*Women with suspicious findings were referred for PAP smear</i>			

## CONCLUSION

The outreach was a huge success and was able to hold because of the support gotten from ACE-PUTOR, MWAN Rivers, Department of Community Medicine, UPTH and the host communities. Various health services were provided for the 340 community members seen during the outreach. Our sincere appreciation goes to all partners for their support and especially the centre leader ACE-PUTOR and consultant-in-charge, PHC Aluu - Prof. Ogaji for showing tremendous leadership in making this outreach a huge success.



**Dr. Abiye Somiari**

*Supervising Senior Registrar (Jan/Feb)*

*Aluu PHC*

## PICTURES



*Figure 3: Doctor attending to clients*

*Figure 4: Laboratory tests for clients*





*Figure 5: Ear syringing being done for a patient*



*Figure 6: Eye examination for a client*



*Figure 7: Breast Examination by MWAN*



*Figure 8: Drugs being displayed at the outreach*





*Figure 9: Clients for the health outreach*

*Figure 10: Family planning counselling ongoing*



*Figure 11: ACE-PUTOR leader with members of staff of PHC Aluu*



## **REPORT ON A 3 DAY COMMUNITY HEALTH MEDICAL AND RESEARCH OUTREACH HELD ON TUESDAY 22<sup>ND</sup> TO THURSDAY 24<sup>TH</sup> MARCH, 2022.**

### **Preamble**

The Centre for Public Health and Toxicological Research in collaboration with Association of Public Health Physicians of Nigeria (APHPN) Rivers State chapter and Medical Women Association of Nigeria Rivers State chapter organized a 3-day Community Health outreach at Ibaa town in Emohua Local Government Area of Rivers state.

The 3 day event started on Tuesday 22<sup>nd</sup> and ended on Thursday 24<sup>th</sup> March, 2022.

The event featured Health talk, free breast cancer screening, free cervical cancer screening, free medical consultation and free eye and ear check and treatment.

### **Methodology**

The Centre (ACE-PUTOR) in collaboration with other bodies mentioned above, bought different kinds of drugs, injections, laboratory equipment to administer to the people of Ibaa.

The Community Chief, Elders, Youths, Security and the entire Ibaa people were officially informed through a letter from the Vice-Chancellor about the Health outreach through their chief for easy outing.

Medical equipment including Vehicles were on ground for easy movement of equipment and medical personnel's to and from Ibaa Community.

### **Health Outreach**

The Chief, elders, youths, women, children of Ibaa community welcomed the medical team on arrival. There was a brief health talk on health challenges as they inhale the black suit from kpo- fire (artisanal refining of crude oil). The hall was well rearranged as soon as the health talk was over for the administering of drugs through proper check up by the medical personnel.

The programme was open to all children under 5 years of age, pregnant women, Nursing mothers and elderly men and women.

All the villagers that came with different health challenges were attended to and drugs administered according to the prescription of the medical doctors on ground. Some test was also conducted, and result given.

### Recommendation

The Community recommended that this kind of outreach should be done quarterly in every village in the local government.

### EVENT PICTURES



Elders of Ibaa Community Chief and Council of Chiefs arriving



Nurses attending to the Elders and dispensing drugs



Cross section of Elderly women waiting for their turn to be attended to by the Physicians



Nurses attending to patients by checking their blood pressure



Physicians attending to Elders



Doctors attending to patients





Nursing Mother getting seated for attention



Nurse attending to Children



Medical team attending to patients



Nurses attending to youths

A handwritten signature in blue ink on a white background.

**Confidence Igwe**

**Admin Secretary**