



# WRaP-Up

Marching towards a HIV/AIDS free future

**W**alter  
**R**eed  
**P**rogram  
**N**igeria

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Newsletter of U.S. Department of Defense Walter Reed Program-Nigeria (DoD WRP-N)



RV 466 Launching and Biopreparedness Initiative

# FOREWORD

**A**s the heavy rainy season comes to a close (unofficially +170 cm of rainfall this year, compared to an average of 140cm in Abuja) in Nigeria, we have seen many fruits of our joint labor ripen from it, both in the fields and in the military to military partnership.

The following articles are about the partnership's successes – JWARG RV 466 protocol initiation, launching of the Biopreparedness Initiative (BPI), awards recognition of WRP-N staff from the Ambassador and DCM, enrollment completion of the second phase II Ebola vaccine candidate trial in Abuja, expansion of cold chain capacity, new community

outreach projects to improve the prevention of mother to child transmission of HIV, ongoing malaria research and quality assurance projects, recognition of NMOD HIP staff promotions and other numerous other activities. We also saw sadness, with the early passing of our biomedical engineer, Ola, and hope that our prayers will be answered to care for the young family he leaves behind.

We march into the next fiscal year with ongoing JWARG, PEPFAR and PMI activities and look toward expanding our research capabilities in each area. WRP-N would like to thank our partners and stakeholders; both internally and externally to our mission and continually seek your guidance and support to

achieve our shared mission with the Nigerian Ministry of Defence's Health Implementation Programme.

**We march into the next fiscal year with ongoing JWARG, PEPFAR and PMI activities and look toward expanding our research capabilities in each area.**

- Senior Management Team  
WRP-N

## Awards ceremony



WRP-N awardees pose with the US Amb (right) and the DCM (left)

**S**eptember 30, 2017, was a colorful day at the US Embassy as it held its Cultural and Awards ceremony and honored its staff for their contributions and hard work to the US mission. The Walter Reed Program-Nigeria's staff formed part of those who were recognized. The 55 awards presented to WRP-N staff included, group, honor and appreciation awards and were presented by the Ambassador, Mr. Stuart Symington and the Deputy Chief of Mission, Mr. David Young.

Cultural identity and unity is an integral aspect of the US mission. It seeks to promote cultural values as a unifying actor to achieving common goals among the various ethnic groups in Nigeria and the foreign community as well.



US Embassy staff in Efik costume



The WRP-N team in the African style

## Research Update



### Vaccine Clinical Trial

After a two month delay in getting the experimental product in-country, it was great to see the Clinical Research Center (CRC), the Defence Reference Laboratory (DRL), support staff, the Deputy Chief of Mission, and MHRP leadership, LTC Julie Ake collaborate and ensure that Nigeria team would get the product in country to complete enrollment of the ongoing phase II clinical trial to evaluate the safety, tolerability and immunogenicity of the Ebola vaccine MVA BN-Filo and Ad26.ZEBOV. The team completed enrolment in late October, in line with the other international sites supported in the study. Once successfully enrolled they will also be followed

up for one year.

As the research mandate of the Walter Reed Program continues to grow, a laboratory is being setup at the Clinical Research Centre to support future clinical trials.

### RV 466

Lessons from the Ebola epidemic in the West Africa sub-region continue to make a way for stakeholders to develop strategic and institutional approaches in order to anticipate and manage outbreaks. A key component of such a strategy includes active surveillance and enhanced capabilities to detect known and unknown pathogens that present with a fever and may cause severe illnesses.

RV 466 is a study on Severe Febrile Illnesses: Surveillances, Detections, Risks and Consequences in West Africa. The study has five implementation sites in Nigeria, out of which three are military and the other two are civilian hospitals. The participating sites are: 68 Nigerian Army Reference Hospital, Yaba, Lagos; 161 Nigerian Airforce Hospital, Makurdi, Benue; 82 Division Hospital, Enugu; Irrua Specialist Teaching Hospital, Edo; and General Hospital Ikorodu, Lagos. The study will engage two reference laboratories; the Defense Reference Laboratory (DRL) Abuja and the African Center of Excellence in Genomics of Infectious Diseases (ACEGID), located at Redeemers University, Ede.



At 161 Nigerian Air Force Hospital Makurdi, : First RV 466 enrollee

On September 11, 2017, the Nigerian Army Reference Hospital Yaba commenced its first study enrollment, which was followed by the Nigerian Air Force Hospital, Makurdi. The civilian sites will begin enrollment later in the calendar year of 2017. RV 466 study site initiation is expected to begin in Ghana and Liberia at the end of 2017. The study was officially launched on September 13, 2017 in Lagos.

- Akindiran Akintunde,  
Bolaji Tiamiyu

## DODWRP-N Supplies 'mama delivery packs' to NMOD-DOD sites

National Demographic Health Statistics (NDHS) show that the number of women patronizing antenatal care (ANC), institutional delivery and postnatal care services in Nigeria is poor, even by standards of the whole African states. In 2013, health facility deliveries stood at about 36%. In Nigeria, the cost of deliveries at health facilities remains a major hindrance to ANC use among the HIV positive pregnant women. Other possible reasons for the low turnout is, individual preference for alternate childbirth providers. PEPFAR requires that improving utilization of maternal and child health indicators will require targeting women with free birth and service delivery. In its effort to maximize health facility delivery, which is critical to eliminating mother to child transmission of HIV, the NMOD/DOD WRP-N provided free child delivery packs, popularly known as mama delivery pack to 75 NMOD-DOD health facilities. The program procured and supplied 2,520 packs to

further improve maternal services in its military facilities. The contents include gloves, delivery mat, umbilical cord clamp, disinfectant, mucus extractor and IV fluids. This donation should improve maternal child services in these sites. Through PEPFAR, institutional delivery at our partnership sites has improved from 326 in fiscal year (FY) 2013 to 529 in FY 2017.



Delivery packs at the warehouse before distribution to sites

In the same vein, the PMTCT has extended its support to the Guards Brigade Medical Center, Abuja with the provision of a porta cabin at the facility's family unit. This support will ensure the delivery of qualitative family planning services and provide a conducive working environment for all.

- Dr. Ahmed Yusuf, Esther Essien



- New PMTCT office

## LABORATORY

### DRL Acquires Latest Liquid Nitrogen Generator and Storage Freezer



New LN2 generator



New storage freezer

The Defense Reference Laboratory (DRL), located at Mogadishu Cantonment Abuja, has continued to stand out with its state-of-the-art laboratory and excellent laboratory services. Currently, the WRP-N program is conducting cutting edge research on severe infectious diseases that range from HIV/AIDS, TB, Malaria, Ebola, Hepatitis, STI's and Ebola. In order to conduct such research successfully, high-tech instruments are key in preserving patient samples. One of such critical

equipment is the Liquid Nitrogen (LN2) generator and the sample storage freezer. The liquid nitrogen produced by the LN2 generator is used to preserve blood samples and biomedical materials which are stored in the sample storage freezer for long periods of time.

The liquid nitrogen generator has the capacity to produce 80 liters of liquid nitrogen within 24 hours. The LN2 M280X2 generator produces liquid nitrogen for the preservation of research samples at DRL. The new sample freezer can store 87,000 samples in 2ml vials until such a time when it's needed. It also serves as a repository and can be used for shipment of samples from program sites in liquid nitrogen dewars, as well as shipments of samples to the United States for further scientific investigations.

With the aid of the liquid nitrogen, blood samples are preserved for further studies at sub degree temperature of minus 196 degree Celsius (-196 °C).

- Bege Dogonyaro, Esther Essien

## Improving Malaria Diagnosis through EQA and Supportive Supervisory Visits



Treasure (left) explaining to the EQA team in Plateau

**M**alaria is a life-threatening disease caused by parasites that are transmitted to people through the bites of infected female *Anopheles* mosquitoes. According to the latest WHO estimates released in December 2016, there were 212 million cases of malaria in 2015 and 429,000 deaths. Effective management of the disease is made possible through supportive supervisory visits to health facilities. Supportive supervision is used as an approach to promote mentorship, joint problem-solving and to communicate between external supervisors and health care providers at the facilities. This method is an effective intervention in increasing malaria diagnosis knowledge among health workers as well as improving their performance. It also strengthens and promotes the quality of health care delivery at the facility level by prompt identification and resolution of laboratory problems.

In recent years, supportive supervision has been implemented to improve quality diagnosis resulting in accurate data for program monitoring and evaluation (M&E) in PMI focus states. From 2012 to 2017, USDOD-WRPN has collaborated with the National Malaria Elimination Programme, PMI/MAPS and State Malaria Elimination Program to strengthen the capacity of laboratory scientists in malaria microscopy, malaria rapid testing, quality assurance and

laboratory supervision. The N M O D - D O D Program is committed to improving malaria case management through the accurate diagnosis of malaria before treatment. The Program has supported over 400 health facilities

consisting of primary, secondary and tertiary health facilities, as well as the private sector laboratories. Each PMI focus state has an inaugurated and trained External Quality Assurance (EQA) team who conducts supportive supervision at the state level. The team is comprised of Quality Assurance (QA) officers, laboratory supervisors and the National Malaria Reference team.

When accessing testing sites for EQA, a national tool comprising of 18 indicators is used. The parameters include documentation, laboratory staff, laboratory space, laboratory safety practice, quality control/assurance and patient care. Over the years, improvement has been observed in these facilities. Moving forward, strong government participation

and ownership is encouraged in order to maintain the structures put in place by the US Government. State governments need to demonstrate support towards conducting independent supportive supervision by their State EQA Reference teams. Of note, only the PMI focus states have institutionalized EQA. EQA in malaria is a necessary standard control to assess and ensure quality in malaria diagnosis. Continuous EQA visits to testing laboratories in all health facilities in Nigeria will bring about the much desired improvement in malaria case management.

**USDOD-WRPN has collaborated with the National Malaria Elimination Programme, PMI/MAPS and State Malaria Elimination Program to strengthen the capacity of laboratory scientists in malaria microscopy, malaria rapid testing, quality assurance and laboratory supervision.**

By Treasure Okoye  
Adeola Ajibade



LCDR Michael Gregory of NAMRU-3 Cairo, paid a visit to 661 Nigerian Air Force Hospital, Ikeja, Lagos

# Biopreparedness and NMOD/USDOD Program

## Biopreparedness Training

**L**agos, September 13, 2017: The Walter Reed Program Nigeria (WRP-N) officially launched the commencement of the Severe Infectious Disease study, clinically known as RV 466 and the Biopreparedness Initiative in Nigeria. The Program hosted 22 international delegates and 30 participants from the US Navy, academia and affiliate foreign and local health institutions, who had come to prepare and share practical experiences on bio-containment of infectious diseases. The team led by LTC Julie Ake, the Deputy Director, US Military HIV Research Program (MHRP), included facilitators from the University of Nebraska, US Department of Defense and participants from US Africa Command, US Army Africa (USARAF) and US Defense Threat Reduction Agency. The team carried out site assessment visits to 68 Nigerian Army Reference Hospital, Yaba, the RV 466 study site, and trained study participants from the Nigerian Ministry of Defence. The high point of the visit was the launching of the study by the US Consul General, Mr. John Bray, assisted by the NMOD Permanent Secretary, AMB. Danjuma Sheni.

The Nigerian Ministry of Defence (NMOD) Permanent Secretary, represented by the NMOD Director of Medical Services, Dr. Toyin Akinlade, in her opening remarks said, “The JWARG study titled Severe Infectious Diseases Surveillance and Detection in West Africa (RV 466) is to commence in three NMOD health facilities. The study is aimed at identifying common pathogens in West Africa that pose public health threat”. The training will strengthen the capacity of the participants not only in the area of research, but also to be able to detect and respond appropriately and promptly to public health emergencies.”

The US Consul General, Mr. John Bray also stressed the impact of the launch when he recounted that since 2005, the Walter Reed Program Nigeria has been working closely with the Nigerian Ministries of Defense to implement HIV prevention, care and treatment through the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) and the President’s Malaria Initiative (PMI). Adding that, “the program has been expending more than \$15 million annually, and has extensive infrastructure that can be built upon for infectious disease crisis response.”

He further stated, “2015 marked the beginning of the Joint West Africa Research Group (JWARG), led by the U.S. Military HIV Research Program at the Walter Reed Institute of Research. JWARG is establishing a bio surveillance network across Nigeria, Ghana, and Liberia. The RV466 study accomplishes bio-surveillance, starting with patients in two Nigerian Ministry of Defense facilities and two civilian sites in Nigeria. This study is the 466th study protocol from the Military HIV Research Program.”

The biopreparedness initiative is aimed at developing the capacity of Nigerians in the management of highly contagious pathogens and patient care. The assessment of existing facilities, clinical care and laboratory responses in Nigeria will aid in designing appropriate curriculum for the study. RV 466 is a surveillance study to determine the risk and consequences of infectious disease in order to obtain an informed decision on tackling such diseases when they emerge. The study will enroll adult volunteers with suspicious infections and will commence studies at the 68 Nigerian Army Reference Hospital Yaba.

## One on one with Dr. Fasina

**S**eptember, 2017, the US Department of Defense and the Nigerian Ministry of Defence (USDOD/NMOD) hosted a team of international scientists and clinicians from the United States, Asia and Nigeria at a biopreparedness training and commencement of another research study - RV 466. Dr. Abiola Fasina, an MHRP Research Physician, anchored the event, which expanded Nigeria’s effort towards containing infectious disease outbreaks. Dr. Fasina is a trained emergency medicine physician with experience and subspecialty training in global health, diagnostic imaging and health policy. She joined MHRP a year ago, primarily to support RV 466, the febrile illness surveillance study. She is also involved in other MHRP/WRP-N research projects and has relocated to Nigeria to provide on-ground clinical support and oversight for on-going and future projects including RV 515. Abiola loves to travel and read when she finds the time. She tells us more about the biopreparedness training.

### What is the reason behind the biopreparedness visit?

This is the next step in a multi-pronged approach to strengthen regional capability and to contain highly infectious pathogens. Nigeria is at the center of this initiative and has a strong regional presence. It is wise to proactively prepare health systems for the next epidemic.

### What is the biopreparedness Initiative about?

In the wake of the Ebola epidemic, public health and international stakeholders realized that regional collaboration, education and capacity building remain the key to preventing the spread of another deadly epidemic. The Nigerian Ministry of Defense realize their role as gatekeepers in this respect and are working with international collaborators to improve Nigeria’s capacity to contain highly infectious pathogens in a multifactorial way. That’s really what the initiative is about.

### Why was it necessary to bring these SMEs together?

This is a complex project that requires subject and local experts. This meeting has drawn from the breadth of experience of clinicians and researchers from Asia, the United States and Nigeria in both civilian and military institutions. It is truly unique and has been a fantastic opportunity to learn from each other and include sustainability strategies from the start as we scale up activities.

### What informed the biopreparedness training?

A clear eyed assessment of capabilities in the wake of the Ebola epidemic. Leaders rightly recognized we narrowly escaped a public health disaster and wanted to strengthen the Nigerian health system further.

### Do you think Nigeria is ready for this Initiative and why is it important?

Absolutely! We wouldn’t be doing this if we didn’t think so. African cities are increasing in size and Lagos exemplifies that trend. It’s a city of extremes and that’s why I love it. As a hub at the center of regional and international travel, you can imagine the magnitude of spread if another epidemic with an epicenter in Lagos isn’t contained. The potential implications could be catastrophic. Nigerians are practical people, first and foremost. We realized that this is important, and so, it needs to be done.

### What has been put in place to ensure its success?

People, people, people. It’s always about people. We have an international cadre of recognized and experienced trainers headed by the U.S Military HIV Research Program (MHRP) and the willingness of our military partners (the Nigerian Ministry of Defence Health Implementation Program) to see it done. That’s our recipe for success.

### What is the expected outcome of the visit/training?

We expect more intensive trainings and assessments to follow and identification of key personnel who will serve as local linchpins and points of contact.

### What can you say about the Program especially as it concerns Biopreparedness activities?

The NMOD/USDOD program is unique. It is harnessing the resources of two great countries to impact health care, further force health protection and foster development of research capacity in Nigeria. In relation to biopreparedness activities, the program is a success. We completed an extremely informative site assessment and got local and international stakeholders communicating. Now we can move forward with making the vision a reality.

### Last words?

I feel extremely honored to be involved in helping to bring this to fruition. Exciting times lie ahead, so stay tuned!



Dr. Fasina



## From the Desk of the Health Implementation Programme (MODHIP)

### Editor's note

Welcome to another exciting edition of the Wrap-Up! This quarter holds many firsts for the Program, evidence that the Program is positioning itself as a leader in the scientific and research world. It has taken up more clinical researches and is interested in protecting the region from infectious disease outbreak. It has pooled together world-class Subject Matter Experts to propel biopreparedness activities in Nigeria. Even as PEPFAR limits funds, the Program continues to meet its targets in laboratory and health care system delivery. On a somber note, we mourn the loss of a beloved colleague, Ola. Moving on, we welcome the active participation of our partner MODHIP with a column on Wrap-Up.

- Esther Essien

### Congratulations!



The US Department of Defense Walter Reed Program-Nigeria celebrates with former Wing Commander Kenneth Ojemen on his recent promotion to the rank of Group Captain. Group Captain Ojemen is the Logistics officer for the NMOD Health Implementation Programme and has been a great supporter of the partnership program. A trained pharmacist, He has been a member of the editorial board of the Wrap-Up newsletter. DOD WPR-N wishes you higher rewards as you fly on in your military career.

### Model partnership

For 12 years now, the military-to-military partnership between the Nigerian Ministry of Defence Health Implementation (NMODHIP) and United States Department of Defense Walter Reed Program-Nigeria (DoD WRP-N) has continued to wax stronger. It has become a global model of how collaborative partnerships should operate and derive mutual benefits. As part of this cooperative agreement, the Walter Reed Program leverages upon infrastructural structures of the Nigerian Ministry of Defence. To underscore the efficiency of this synergy, DoD WRP-N recently provided a forty feet (40ft) container that would serve as an office for the Barracks Health Committee at the Defence Headquarters Medical Centre, Abuja. MODHIP as a contributing partner supported this laudable effort with initial infrastructural platform and provision of electrical power and pipe borne water.

In its efforts towards controlling

tuberculosis in Nigeria, the NMOD/USDOD Program is constructing and developing models for a Containerized Modular Tuberculosis Laboratory (CMTBL) which will be located at the Defense Reference Laboratory (DRL) Abuja. In preparation to this, MODHIP is currently constructing an extension building which will house the laboratory and generating sets. The scope of this project will also involve environmental impact assessment at the selected site. This Program continues to be a model for ensuring development in Nigeria, as this laboratory installation is jointly funded by both sides of the partnership.

**The military-to-military partnership between the Nigerian Ministry of Defence Health Implementation (NMODHIP) and United States Department of Defense Walter Reed Program-Nigeria (DoD WRP-N) has continued to wax stronger.**

- Group Captain KO Ojemen



## Farewell

The Walter Reed Program-Nigeria in August 2017, lost one of its colleagues, Mr. Olabulo Olayiwola. Until his demise, Mr. Olabulo was one of the Bio-medical Engineers in charge of managing the installation and maintenance of laboratory equipment across Walter Reed Program-Nigeria and the Nigerian Ministry of Defence military health facilities.

Ola had a wealth of knowledge and skills in Medical Laboratory equipment and made a tremendous difference in sustaining the HIV/AIDS and research activities of the Program. A gentle and jolly fellow, Ola endeared himself to all with his dedication and enthusiasm to work.

He is survived by his wife and three young sons. Ola will be deeply missed, as we fondly remember all our colleagues whom we have lost in years past.

Ola was, to his friends and colleagues- a reliable soul and will be remembered in various ways. Here are a few: *To Taiwo, he was her best friend, a good mentor, and a man of integrity who believed in a fair playing ground for all.*

*To Zipporah - "What's the way forward?"*

*To Dapo - he said, "What are your activities for today?"*

*To Aisha - "he abhorred cheating and was very selfless."*

*To Zubby - "he was dedicated and hardworking."*



The WRP-N family attest to their love for Ola in this tribute from Mr. Dogonyaro Bege.

### **Tribute**

*Engineer Olayiwola Olabulo was a friend and colleague. He was very hard working, dedicated and passionate in discharging his duty, which he did with integrity. He was ready for any task assigned to him and he executed it with little or no supervision.*

*Death came at the prime of his career. It is beyond imagination that he has gone!*

*May God console his family, friends and all of us at NMOD/USDOD WRP-N program as well as the Embassy community.*

*May Ola's soul and that of all the faithful departed rest in peace.*

## IN REMEMBRANCE

## Walter Reed

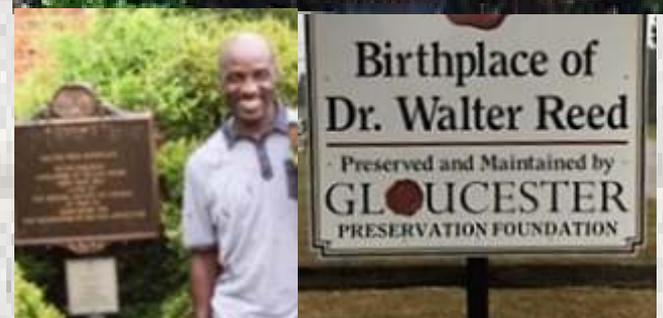
September 13 was the birthday of Walter Reed, the person for whom our Program is named after. USDOD Walter Reed Program - Nigeria celebrates this genius, whose medical and research exploits brought succor to humanity and fame to the U.S. Army.



### **What do you know about Walter Reed?**

Major Walter Reed was a U.S. Army physician, surgeon and bacteriologist who lived from September 13, 1851 to November 22, 1902. In 1901, he led the team that postulated and confirmed the theory that yellow fever is transmitted by a particular mosquito species rather than by direct contact. This insight gave impetus to the new fields of epidemiology and biomedicine.

July 2017, DOD WRP-N's Laboratory Facility Supervisor, Mr. Bege Dogonyaro, paid homage to the birthplace of Walter Reed, whose legacy is maintained by the people of Virginia, U.S.A.



Mr. Bege Dogonyaro during his visit to Walter Reed's birthplace

### Field Staff trained on Visualization

**S**eptember, 2017, the Strategic Unit team of the US Department of Defense and the Nigerian Ministry of Defence (USDOD/NMOD) Program, trained 27 site field staff on data visualization. The training targetted at the site administrators and data analysts sought to build their capacity on proper use and reporting of data across all sites. Program data show statistics of Program target delivery, but discrepancies in data reporting has been a source of constant worry therefore leading to this training. Participants were also trained on the monthly summary reporting form and the PEPFAR new reporting guidelines.

Esther Adebayo



## PREVENTION

### Partner Notification Services roll out

**P**EPFAR, in line with World Health Organization, has identified Assisted Partner Notification Services as an innovative HIV Testing Services strategy in closing the HIV testing gap and increasing diagnosis of 90% of all people with HIV by 2020. This strategy involves active tracking of the sexual partners of Persons Living with HIV and the partners of drug injecting persons, together with their children, to offer them HIV tests. These partners, have an increased probability of being HIV positive and the PEPFAR program is working towards finding these persons and placing them on treatment, as part of its effort to achieve epidemic control in military settings and the country as a whole.

The DOD WRP-N HIV Testing Services program in partnership with the Ministry of Defense Health Implementation program adapted the strategy into the military setting and provided a training package for service providers working in military facilities. The team also worked with the Strategic Information Unit to adapt Monitoring and Evaluation tools, develop platforms on the electronic District Health Information

System (DHIS) and develop data reporting tools which would enable field Data Management staff to collect and upload PNS data. Consequently, two batches of trainings have been conducted for forty seven (47) military facilities in order to equip healthcare service providers with the specialized skills to provide PNS. Issues discussed at these trainings include; intimate partner violence, culture, stigma, provider and other client barriers to the provision of the service in the military settings. Prior to the trainings, the team also developed program specific job aids to help the service providers commence services with minimal hitches.

Within 6 months of implementation of services, the program witnessed an increase in uptake of the service and also recorded a 27% HIV positivity yield amongst people tested through this service. This has contributed significantly to the increased identification of persons living with HIV within the military and civilian populations. The persons identified have been



Group work on PNS challenges

placed on antiretroviral therapy thereby reducing the transmission of HIV to uninfected persons and controlling the spread of the epidemic.

Angela Agweye

**The DOD WRP-N HIV Testing Services program in partnership with the Ministry of Defense Health Implementation program adapted the strategy into the military setting and provided a training package for service providers working in military facilities.**

## Importance of Pharmacovigilance in DOD/NMOD Program

The treatment and effective management of HIV and AIDS hinges on consistent and proper medication use, which involves antiretroviral therapy (ARV). People can now live longer due to ART, and as a result, adverse events and toxicants need to be part of lifelong treatment monitoring. Studies on the incidence of adverse drug reactions (ADRs) from patients of developing and developed countries have been reported at a range of 11 percent to 35 percent.

If adverse reactions associated with the use of antiretroviral drugs are not closely monitored and promptly treated, the following may occur:

- Adversely alter patient adherence to therapy;
- Diminish efficacy of the treatment, and
- Increase the risk for emergence of secondary drug resistance and consequently increase morbidity and mortality.
- Treatment of adverse drug reactions (ADRs) imposes a higher financial burden on health care.

Spontaneous reporting of the individual case safety report (ICSR), is presently the mainstay of safety monitoring of medicines in Nigeria. Since 2010, the USDOD -NMOD Program has been active in promoting ICSR in their supported hospitals through training and retraining of care providers on pharmacovigilance. They have also recorded improvement in building the capacity of health care workers from 27 sites in advanced and basic pharmacovigilance.

### What is Pharmacovigilance?

Pharmacovigilance is the science and the activities relating to the knowledge, detection, assessment and prevention of adverse effects or any drug-

related problem (WHO 2002). Pharmacovigilance can be passive or active.

Passive pharmacovigilance is the most common form of pharmacovigilance. Commonly referred to as “spontaneous or voluntary” reporting, it involves reporting based entirely on the initiative and motivation of the potential reporter/s. No active measures are taken to look for adverse effects other than the encouragement of health professionals and others to report safety concerns. Some countries make this form of reporting, mandatory. Clinicians, pharmacists and community members should be trained on how, when and what to report. Pharmacovigilance using a spontaneous reporting system is designed to detect adverse drug reactions (ADRs) not previously observed in preclinical or clinical studies. It improves understanding of the potential risks, including reactions resulting from drug interactions or drug effects in particular populations. It also provides a basis for effective drug regulation, education and consequent changes in practices by prescribers and consumers.

Active pharmacovigilance (or proactive) are active measures taken to detect adverse events. This is managed by active follow-up after treatment, and the events may be detected by asking patients directly or by screening patient records. This surveillance is best done prospectively. Active pharmacovigilance is sometimes very descriptive and is referred to as hot pursuit.

### Reasons for monitoring adverse drug reactions include:

- To measure risk (incidence), including comparative risk of different ART regimens or individual medicines.

- To identify risk factors for important reactions so that appropriate risk management can be applied and the risk of harm minimized.

- To assess safety in pregnancy and lactation.

- To provide evidence for effective risk prevention and management

- To promote safer use of ARVs.

- To inform evidence-based regulatory action.

### What is an Adverse Drug Reaction (ADR)?

The World Health Organization defines adverse drug reaction as a harmful and unintended response, which occurs at doses normally used in man for prophylaxis, diagnosis or therapy of diseases, or for the modification of physiological function.

### What is the difference between an ADR and a side effect?

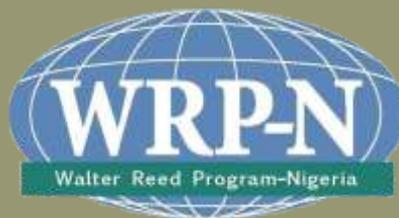
A side effect can be defined as any unintended effect of a pharmaceutical product occurring at doses normally used in humans, which is related to the pharmacological properties of the drug. Such effects may or may not be beneficial. Side effects are related to the known properties of the drug and can often be predicted. However, a side effect above the usual or expected level, becomes an adverse drug reaction. Health professionals are encouraged to report all drug related problems to the National Pharmacovigilance Centre.

### Spontaneous reporting of the individual case safety report (ICSR), is presently the mainstay of safety monitoring of medicines in Nigeria.

- Ijeoma Ezeuko - Program pharmacist, USDOD Walter Reed Program-Nigeria



**Catching them young - WRP-N's outreach programme for the youth. Senior students of Divine Mercy Secondary School, Asokoro, Abuja, at a Health forum, organized by the Communications Unit**



**HJFMRI**



**WRP-N**

Walter Reed Program-Nigeria - an affiliate of Walter Reed Army Institute of Research U.S.A., works in partnership with the Nigeria Ministry of Defence. It is a 'military to military' collaboration to combat HIV/AIDS and related diseases in Nigeria through research, prevention, care, treatment and training.  
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For more information; visit our website at [www.wrp-n.org](http://www.wrp-n.org)

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