CAM-HERO
CAMEROON HIV RESEARCH FORUM

Cameroon HIV/AIDS Research Conference

ABSTRACT BOOK

CAMHERO 2024

4th Edition

5th, 6th, and 7th December 2024 - Douala, Cameroon

H.E. **Dr. Manaouda Malachie**
Minister of Public Health, Cameroon

Prof. **Louis Richard Njock**
Secretary General of the
Ministry of Public Health

Discours d'ouverture de Monsieur le Secrétaire Général du Ministère de la Santé Publique

Monsieur le Directeur de la Lutte contre la Maladie les Épidémies et les Pandémies,

Madame le Chef de Division de la Recherche Opérationnelle en Santé,

Monsieur le Secrétaire Permanente du Comité National de lutte contre le VIH/SIDA,

Monsieur le Président du Comité National d'Éthique pour la Recherche en Santé Humaine,

Messieurs les Directeurs ou les Représentants des organisations partenaires de CAM-HERO,

- Elisabeth Glaser Pediatric AIDS Foundation (EGPAF)
- Center for Disease Control (CDC)-Cameroon
- Cameroon Baptist Health Convention (CBCHS) research group
- Clinical Research Education, Networking and Consultancy (CRENC) et International Epidemiological Database to Evaluate AIDS (IeDEA)
- Site ANRS-MIE-Cameroun
- Centre International de Recherche Chantal Biya (CIRCB)
- Groupe de recherche VIH/SIDA Hôpital Central de Yaoundé
- Groupe de recherche VIH/SIDA Université de Dschang

Mesdames et Messieurs les chercheurs du VIH/SIDA,

Chers jeunes étudiants,

Chers participants,

Je me sens particulièrement heureux de vous souhaiter la bienvenue à Douala, en cette troisième édition du Forum de la Cameroon HIV/AIDS Operational Research (CAM-HERO) dont le Thème est **« Recherche pour les politiques et les soins de Santé sur le VIH/SIDA».**

Avant de poursuivre mon propos, permettez-moi d'adresser au nom de Monsieur le Ministre de la Santé Publique, les remerciements à tous les Partenaires Techniques et Financiers, qui une fois de plus, n'ont pas hésité à apporter leur concours à la réussite de cet évènement désormais

coutumier et qui nous est si cher dès lors qu'il fournit des informations capitales pour orienter notre combat contre le VIH.

En effet, le but du gouvernement du Cameroun demeure de faire reculer le VIH/Sida, à travers l'atteinte de l'objectif 95-95-95 d'ici 2030. Pour ambitieux qu'il soit, il n'est pourtant pas inaccessible, si on prend l'exemple de l'Eswatini, un pays du continent abritant 1,247,688 âmes, qui y est parvenu.

Par ailleurs, force est de constater que l'identification systématiquement des goulots d'étranglement par les chercheurs et l'information régulière sur les résultats au gouvernement, sont des catalyseurs pour l'ajustement des diverses stratégies de lutte contre le VIH/Sida. Nous aspirons donc à ce que la Recherche Opérationnelle qui est le socle de l'activité de CAM-HERO puisse nous y mener de manière cohérente, solide et durable.

Une fois de plus, nous adressons nos félicitations aux organisateurs pour cette heureuse initiative qui fait son chemin.

Mesdames et Messieurs,

Depuis 2020, la Cameroon HIV/AIDS Operational Research Forum (CAM-HERO), accompagne la lutte contre le VIH/SIDA, en collaboration avec la Division de la Recherche Opérationnelle en Santé (DROS).A son actif, on compte, la tenue des éditions 2020 et 2021 qui ont contribué aux r ésultats suivants :

1. L'engagement de plus d'une cinquqntqine de chercheurs et acteurs de la recherche, de différents niveaux sur la thématique du VIH;

2. L'élaboration consensuelle les priorités de recherche opérationnelle sur le VIH/Sida et pour une durée de 5 ans. Ledit document a fait l'objet d'une publication scientifique dans une revue de haute qualité. Nous sommes heureux de constater que chercheurs, sponsors et régulateurs de la recherche s'en inspirent. Nous savons pouvoir compter sur cette communauté des chercheurs pour une actualisation régulière de ce précieux document.

Au vu de ces résultats, je vous exhorte à partager votre expérience avec des acteurs d'autres domaines pour l'aboutissement de travaux pertinents. Dans ce contexte, la mise sur pied de réseaux de chercheurs et structures de recherche est une évidence.

Mesdames et Messieurs,

Parmi les objectifs de cette troisième édition,

- L'idée d'une journée de formation des jeunes chercheurs à la méthodologie de la recherche a particulièrement marqué notre attention, je voudrais insister sur l'éthique de la recherche qu'il serait bienvenu de leur inculquer. Nous renouvelons nos remerciements à CAM-HERO pour cette idée innovatrice et saluons particulièrement les formateurs commis à cette tâche. Mention spéciale à nos hôtes dont le Professeur Friedrich Thienemann et le Dr Appolinaire Tiam arrivés respectivement d'Afrique du Sud et des États Unis. Soyez les bienvenus et soyez rassurés de notre soutien constant. Jeunes chercheurs, profitez de cette opportunité de très haute facture.

- Dans le même sillage et suite aux recommandations des éditions précédentes, le projet de production d'un guide national du chercheur sur le VIH/SIDA demeure pertinent. Ce guide serait au chercheur ce que ``Les Directives Nationales de Prevention et de Prise en Charge du VIH au Cameroun'' sont au clinicien. A ce titre, la démarche consensuelle dont vous avez fait preuve en impliquant dès la conception : associations des bénéficiaires, chercheurs, décideurs, sponsors est particulièrement louable. Par ailleurs, de mise sur pied d'un « registre national de recherche sur le VIH/Sida » en collaboration avec les autorités de réglementation reste d'actualité.

Toutes ces initiatives indiquent un engagement fort à accompagner le MINSANTE dans la recherche de solution pratiques, et pertinentes en vue de l'amélioration de la santé des populations. Je réaffirme que le Ministre de la Santé Publique est sensible ce qui est en droite ligne de son agenda de transformation du système de santé au Cameroun.

Je salue donc tout particulièrement : EGPAF ; Le Site ANRS-MIE-Cameroun ; Le CIRCB ; le CRENC-IeDEA ; La Cameroon Baptist Convention Health Service Research ; le Groupe de recherche VIH/Sida de l'Hôpital Central et de l'Université de Dschang pour leur concours permanent au développement de la recherche dans notre pays.

Dans l'attente des recommandations fortes, concrètes et directement applicables, je déclare ouverte la conférence sur **« Recherche pour les politiques et les soins de Santé sur le VIH/Sida».**

Vive le Ministère de la Santé Publique,

Vive la République du Cameroun et son illustre Chef le Président Paul Biya,

Je vous remercie.

Prof. Louis Richard Njock

Secrétaire Général du Ministère de la Santé Publique

Organizing Committee

Prof. **Anne-Cecile Bissek**
DROS / MINSANTE

Dr. **Rogers Ajeh**
UCF / MINSANTE

Dr. **Joseph Fokam**
NACC / MINSANTE

Prof. **Anastase Dzudie**
CRENC - IeDEA

Dr. **Patrice Tchendjou**
EGPAF

Dr. **Eveline Mboh Khan**
CBCHS

Dr. **Boris Tchounga**
EGPAF

Dr. **Peter Ebasone**
CRENC-IeDEA

Dr. **Shu Emile**
EGPAF

Mme **Naah Felicite**
DROS / MINSANTE

Clarisse Lengouh
CRENC-IeDEA

Lionel Ngamani
CRENC - IeDEA

Gabriel Mabou
CRENC-IeDEA

Luma Ngonga
CRENC - IeDEA

Kathleen Nzeusseu
CRENC - IeDEA

Raissa Banboye
CRENC - IeDEA

Scientific Committee

Abstracts Team	
Dr. Patrice Tchendjou	EGPAF
Dr. Joseph Fokam	CIRCB
Prof. Anastase Dzudie	CRENC-IeDEA
Dr. Peter Ebasone	CRENC-IeDEA
Gabriel Mabou	CRENC-IeDEA
Emma Ngonga	CRENC-IeDEA
Kathleen Nzeusseu	CRENC-IeDEA
Raissa Bamboye	CRENC-IeDEA
Reviewers	
Pr. John Ditekemena	EGPAF
Dr. Boris Tchounga	EGPAF
Dr. Patrice Tchendjou	EGPAF
Dr. Tiam Appolinaire	EGPAF
Dr. Pascal Nji Atanga	CBCHS
Dr. Nshom Emmanuel	CBCHS
Dr. Eveline Mboh Khan	CBCHS
Dr. Gilbert Tene	CBCHS
Dr. Edouard Tshimwanga Katayi	CBCHS
Dr. Florence Tumasang	CBCHS
Prof. Anastase Dzudie	CRENC-IeDEA
Prof. Marcel Yotebieng	CRENC-IeDEA
Prof. Nadia Sam-Agudu	CRENC-IeDEA

Dr. Ebasone Peter	CRENC-IeDEA
Dr Rogers Ajeh	CRENC-IeDEA
Dr. Joseph Fokam	CIRCB
Dr. Nka Alex	CIRCB
Dr. Ezechiel Ngoufack	CIRCB
Dr. Collins Chenwi	CIRCB

Table of Contents

MAIN ACTORS OF CAM-HERO 2024

Participation organisations

MINSANTE / DROS

La Division de la Recherche Opérationnelle en Sante a été par Décret N°2002/209 du 19 aout 2002 du Président de la République portant Organisation du Ministère de la Sante Publique. Elle compte deux Cellules à savoir : la Cellule de la Recherche Clinique (CRC) et la Cellule des Réseaux Scientifiques (CRS).

A ce jour, le Décret Nº 2013/093 du 03 Avril 2013 du Président de la République, réorganisant ledit Ministère, a permis de passer de la Cellule des Réseaux Scientifiques à la Cellule des Réseaux Scientifiques et de la Promotion de l'Éthique (CRSPE), lui attribuant ainsi le rôle de la promotion de l'éthique.

La DROS a pour mission régalienne:

- Le suivi des études en matière de recherche clinique;
- La promotion de la recherche en milieu hospitalier;
- Promotion de la recherche opérationnelle et de la vulgarisation des résultats sur la lutte contre les maladies, la santé de la reproduction et la nutrition, en liaison avec les administrations concernées;
- Le suivi des questions relatives à la biotique, en liaison avec les administrations et organismes concernés;
- Le suivi de la recherche sur l'utilisation des médicaments traditionnels améliorés, en liaison avec le Ministre en charge de la recherche;
- La traduction des résultats probants de la recherche en proposition d'action;
- L'appui à la recherche sur les plantes médicinales;
- La mise en place des réseaux scientifiques et la promotion de l'éthique;
- Des relations avec l'enseignement supérieur dans le domaine de la formation initiale et continue.

Principales réalisations

- **Dans le cadre règlementaire de la recherche opérationnelle pour la santé humaine:**

De nombreux efforts ont été faits, l'on peut citer :

- Loi N°2022/008 du 27 avril 2022 relative à la recherche médicale impliquant la

personne humaine au Cameroun;

- Décision N°0689/D/MINSANTE/SG/DROS du 29 juillet 2009 portant conditions de délivrance de l'Autorisation Administrative de Recherche en Santé Humaine au Cameroun;
- Lettre-Circulaire N°D36-13/LC/MINSANTE/SG/DROS/YC du 09 février 2011 relative à la Mise en Œuvre de la Recherche Opérationnelle en Santé au Cameroun;
- Arrêté N°0977/A/MINSANTE/SESP/SG/DROS du 18 avril 2012 portant Création, Organisation et Fonctionnement des Comités d'Éthique de la Recherche pour la Santé Humaine au sein des Structures relevant du Ministère en charge de la Santé Publique;
- Décision N°1090/D/MINSANTE/SESP/SG/DROS du 13 juillet 2012 constatant la Composition du Comité National d'Éthique de la Recherche pour la Santé Humaine; La délivrance d'une moyenne de 28 AAR par an depuis 2006; La tenue de plusieurs rencontres scientifiques : fora, conférences, journées de restitution des résultats de recherche…

➢ **En matière de la gouvernance de l'éthique de la recherche en santé avec l'appui du projet BREEDSAFCA financé par EDCTP**:

- La révision des textes réglementaires existants sur la recherche pour la santé humaine au Cameroun (en attente d'approbation par le PM);
- L'appui pour la création de 04 comités d'éthique régionaux ; Littoral et Ouest fonctionnel, Nord et Nord-Ouest en attente de la décision de constatation du MINSANTE ;
- L'établissement de réseaux scientifiques avec des institutions de recherche;
- L'élaboration d'un « Guide de procédures d'évaluation éthique et administrative des protocoles de recherche en santé humaine » Valider. (Document encore de mise en forme et impression).

Comité National de Lutte contre le SIDA (CNLS)

Le Comité National de Lutte contre le SIDA (CNLS) est l'organe chargé de la coordination et de la gestion du Programme National de Lutte contre le SIDA sur l'ensemble du territoire national en collaboration avec les administrations et les partenaires nationaux et internationaux.

La mission essentielle du CNLS est d'offrir un cadre national d'interventions, d'élargir la réponse nationale à l'épidémie et de coordonner la mise en oeuvre des activités de lutte contre le sida. Le CNLS a pour missions de définir la politique générale de la lutte contre le sida au Cameroun, et de veiller à son application.

Il s'agit entre autres :

- De la coordination de la gestion du Programme National de Lutte contre le SIDA
- De l'appui technique aux partenaires impliqués dans la réponse sectorielle ;
- De la coordination de la stratégie nationale de communication du Comité National de Lutte contre le SIDA ;
- De la coordination des activités de surveillance épidémiologique et comportementale
- Du suivi-évaluation des activités menées.

Le CNLS est présidé par le Ministre de la Santé Publique assisté par son Sécretaire Permanent le Dr Fokam Joseph.

CIRCB

Centre International De Référence “Chantal Biya” Pour la Recherche Sur la Prévention et la Prise en Charge du VIH/Sida

Inauguré le 23 février 2006, le Centre International de Référence « Chantal Biya » pour la recherche sur la prévention et la prise en charge du VIH/SIDA (CIRCB) est le résultat du plaidoyer initié par les Premières Dames d’Afrique, à l’initiative de la Première Dame du Cameroun Madame Chantal Biya, Ambassadrice de Bonne Volonté de l’UNESCO et Ambassadrice Spéciale de l’ONUSIDA. Il participe à l’élan global de la communauté internationale pour accélérer les connaissances ainsi que la qualité des soins et services destinés aux personnes infectées et/ou affectées par la maladie.

Selon le décret N° 2018/507 du 20 Septembre 2018, portant réorganisation de cette institution, le CIRCB est un établissement public à caractère hospitalier de recherche pluridisciplinaire et à vocation nationale et internationale. Le Centre est placé sous la double tutelle du Ministère de la Santé Publique et du Ministère des Finances du Cameroun

Pour atteindre ses missions, le CIRCB est doté d’un plan de travail annuel dont le programme est subdivisé en quatre sous-programmes : (1) la prévention du VIH et du SIDA ; (2) la prise en charge des personnes vivant avec le VIH et le SIDA, (3) les analyses d’impact et enseignement spécifiques sur le VIH, (4) la gouvernance et appui institutionnel.

Le CIRCB dispose d’un réseau de partenaires nationaux, internationaux et multidisciplinaires. Il est doté de laboratoires modernes et d'un plateau technique de haut niveau, couvrant la Virologie, l’Immunologie, la Microbiologie, la Biologie Moléculaire, la Biologie Systémique, les Analyses Médicales, la bio-imagerie médicale et une bio-banque aux standards internationaux.

Le CIRCB entend ainsi pleinement jouer sa partition dans le combat universel contre le fléau commun qu'est l'infection à VIH. A cet effet, les programmes de recherche et les activités de routine qui y sont menés sont orientés essentiellement vers le mieux-être des personnes infectées et/ou affectées par le VIH. Dans cette action, une part essentielle est accordée au partenariat scientifique et le CIRCB entend développer davantage ses collaborations tant au niveau national qu'au plan international. Par ailleurs, l'expertise des chercheurs du CIRCB, régulièrement renforcée avec la collaboration de divers partenaires, constitue un réel atout pour le développement de l’institution. Le Centre est aujourd’hui un pôle de référence non seulement pour le VIH, mais aussi pour le diagnostic moléculaire et la surveillance des variants de la COVID-19.

Sous l'impulsion du Directeur Général, le Professeur Alexis NDJOLO, le label CIRCB est davantage tourné vers l'international, avec un Conseil Scientifique doté d'éminents professeurs du monde de la médecine et de la recherche scientifique, présidé par le Professeur Carlo-Federico PERNO, et une Task-force animée par le Professeur Vittorio COLIZZI de la coopération italienne. Le CIRCB porte à son actif plus de 300 publications scientifiques sur le VIH et ses coïnfections, ainsi que sur la COVID-19.

CRENC - IeDEA

The International Epidemiologic Database to Evaluate AIDS (IeDEA) is a global research consortium managing data from nearly 2 million people living with HIV/AIDS across 47 countries in seven regions. The Cameroon IeDEA study, part of the Central Africa IeDEA regional group (Rwanda, Burundi, DR Congo, Congo Brazzaville, and Cameroon), is implemented by the Clinical Research Education and Consultancy (CRENC) foundation in collaboration with the Ministry of Public Health, including the National AIDS Control Committee (NACC), Division of Health Operational Research (DROS), and participating health facilities.

IeDEA's primary goal is to utilize clinical, laboratory, and epidemiologic data from HIV patients to address research questions on HIV/AIDS and related comorbidities that single-country cohorts cannot resolve. Additionally, it aims to build scientific capacity and productivity in Cameroon. CRENC collaborates with international IeDEA PIs and DROS to align IeDEA Cameroon with the national HIV/AIDS research agenda. CRENC's broader mission is to generate high-quality evidence to inform policy and care through impactful research.

Elizabeth Glaser Pediatric AIDS Foundation (EGPAF)

Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) is a proven leader in the global fight to end HIV and AIDS, and an advocate for every child to live a full and healthy life into adulthood. For more than 30 years, EGPAF has been a leader in meeting urgent needs in pediatric HIV and AIDS in the world. It has marked its presence in 13 different countries. EGPAF seeks to end global pediatric HIV/AIDS through prevention and treatment programs, research, and advocacy.

EGPAF marked its first footprints in Cameroon in 2000 through provision of technical assistance and support to the Government of Cameroon and other national partners like CBCHS in PMTCT program. Since 2015, EGPAF has being supporting Ministry of Public health of Cameroon in fighting public health threats through twelve (12) projects which include:

- POC-EID project; CAP TB project and CCA project sponsored by UNITAID
- Pediatric Centre of Excellence project; Gender based Violence Project; ECHO and COVID-19 Response sponsored by CDC through DELTA mechanism
- HIV-FREE Project; Atteindre 95 project; Taïbiten Project sponsored by CDC/PEPFAR
- New Horizon project Sponsored by Johnson & Johnson (J&J)
- Breakthrough partnership (BTP) project sponsored by ViiV Healthcare

The projects so far implemented have enabled the Ministry of Public Health to improve Implementation of high-quality, evidence-informed case-finding and clinical care services for HIV to achieve the UNAIDS' 95-95-95 and to support progress towards epidemic control in Cameroon. These have helped increase access to EID among HIV-exposed infants and ensured early initiation on ART among HIV-positive infants through procurement and informed placement of innovative POC technologies. EGPAF has also contributed to the reduction in pediatric TB morbidity and mortality in Cameroon, as well as working to improve the integrated use of molecular diagnostics for both TB and HIV. EGPAF contribution through these projects has also helped to address GVB/SGVB and mitigate the life-altering effects of violence. The foundation has equally supported the Cameroon Government to respond to limited availability of second and third-line pediatric and adolescent treatment options through donation of drugs to meet the humanitarian needs of children, adolescents and young people aged 24 years and below who need second or third-line antiretroviral drugs; as well as has supported the Ministry of Public Health to improve access to COVID-19 testing, isolation, care and treatment interventions through the CCA project.

EGPAF conducts advanced research and innovation to prevent, treat and end HIV AIDS in children, adolescents and families. This is being implemented with Global Research Unit experts in clinical, implementation, community, regulatory, statistical, qualitative and quantitative research.

In Cameroon, the research and evaluation portfolio vary from clinical randomized trials with particular designs (programmatic cluster randomized, stepped wedge cluster randomized) to repeated cross-sectional surveys, programmatic evaluation specific approaches (program outcomes evaluation, pre and post intervention evaluation), cost effectiveness analysis and qualitative assessments. The Cameroon research portfolio is classified into three main categories: The HIV Research and Evaluation(R&E) studies, Tuberculosis R&E studies and the COVID-19 R&E studies.

The HIV Research and Evaluation category is made up of Atteindre95 evaluation PPOP, the New Horizon, the MALE study (Closed) and the POC EID CMR study (Closed). While the Tuberculosis Research and Evaluation counts 5 studies: the TIPPI M&E study, the CONTACT study; INPUT study; CAP-TB CEA studies and the CONSENT study. The COVID-19 Research and Evaluation which is the most recent category includes 3 main studies: the IPC study; INTEGRATE study and the EFFECTIVENESS study.

EGPAF Cameroon Leadership courtesy visit to H.E the Minister of Public Health Cameroon

The Founder Elizabeth Glaser with her Child Ariel

Cameroon Baptist Convention Health Services (CBCHS)

The Cameroon Baptist Convention (CBC) Health Services (CBCHS) is a Non-profit, Faith-based Healthcare Organization that offers holistic care to all as an expression of Christian love. The CBCHS seeks to assist in the provision of care to all, who need it as an expression of Christian love and as a means of witness, in order that they might be brought to God through Jesus Christ. Thus, the Health Board provides exemplary health care with genuine compassion and with the overriding purpose of evangelical witness.

The CBCHS works in partnership with national and international governmental and nongovernmental health care organizations, and funding agencies in Africa and other parts of the world. Our team of over 6,500 employees; made up of various specialists, (Doctors, Nurses, lab scientists, Administrators, Social Workers, and other Support Staff) respond to the health needs of people in both Urban and Rural underserved communities daily. Our services cover the entire country, with facilities in 9 of the 10 Regions of Cameroon, open 24/7 to provide holistic care to all. We maintain partnerships with National and International Organizations in providing services that range from village Primary Health Care to highly specialized hospital-based care with integration of other social services. The CBCHS comprises 10 hospitals (3 of which are over 250-bed hospitals), over 34 integrated Health Centers, over 50 primary Health Centers, a pharmaceutical procurement and distribution department, a Baptist Training School for Health Personnel (BTSHP), a Baptist Institute of Health Sciences, A Baptist School of Public health, a Center for Clinical Pastoral Education and Social Services (CECPES), Services for People with Disabilities, cancer detection, treatment and management services, among others.

From the early 90s, CBCHS started a comprehensive HIV/AIDS care and prevention program focusing on community mobilization for HIV prevention, identification of HIV-positive cases to put on treatment, provision of care and treatment services to those enrolled on antiretroviral drugs to keep them in care and achieve viral suppression, and psychosocial support for those infected or affected by HIV. With funding from EGPAF and then USAID through the AWARE HIV/AIDS project, CBCHB supported the scale-up of PMTCT services in six of Cameroon's ten regions and in 12 countries in the West and Central African sub-region. Since September 2011, CBCHB with funding from CDC/PEPFAR projects has contributed to scaling up HIV prevention, especially PMTCT, and the uptake of ART in the Northwest, Southwest, Littoral, Center, and West Regions of Cameroon. CBCHS & CDC Cameroon led the development of the national tool for the management of longitudinal data for patients enrolled in ART in Cameroon called the DATA Manager (DAMA). This tool was approved by the MOH and is being scaled up in the entire

country. CBCHS was selected in 2023 to lead the implementation of the second CAMPHIA national survey in Cameroon in close collaboration with the MOH, CDC, and other partners, to assess the impact of interventions implemented to fight HIV since the previous survey in 2017/2018, with funds from CDC/PEPFAR. This national survey will generate data that will inform future planning and resource prioritization to reach HIV epidemic control in Cameroon. CBCHS provides a huge platform for research in Cameroon and has an Institutional Review Board (IRB) that regulates research ensuring the protection of human subjects.

Figure 1. Initial CAMPHIA discussions with HE, the Minister of Public Health & the inaugural Steering Committee Meeting - Sept 2023

The Central and West Africa Implementation Science Alliance (CAWISA)

The Central and West Africa Implementation Science Alliance (CAWISA) was established in 2019 with a small award from the Fogarty International Center at the US National Institutes of Health. CAWISA is led by Prof. Nadia Sam-Agudu of the Institute of Human Virology Nigeria, the University of Cape Coast Ghana, and the University of Minnesota USA. CAWISA leadership currently includes locally based and diaspora faculty from five focus countries in West and Central Africa: Gambia, Ghana, Nigeria, Cameroon, and the Democratic Republic of the Congo.

Our work is focused on increasing understanding of implementation science and its application in research and practice in West and Central Africa. CAWISA has two main objectives:

- To facilitate the generation of local evidence led by local scientists to solve West and Central Africa's most pressing public health problems
- Provide mentorship to postdoctoral early researchers in West and Central Africa to become independent investigators in implementation research.

Training, capacity and skill-building, and dissemination of knowledge are core CAWISA activities. These and other activities are entrenched in and guided by five pillars:

- Leadership and Vision
- Scholars and Mentors
- Strategic Partnerships
- Research Productivity
- Sustained Funding

CAWISA supports colleagues, scholars, collaborators and partner institutions in our focus countries, and in turn is supported by funding from collaborative projects. CAWISA projects and the type of support provided differ from country to country and are determined by context-specific needs. Please check out our website at CAWISA-afr.org; Twitter handle: @CAWISAresearch.

Mot d'ouverture de Madame la Chef de Division de la Recherche Opérationnelle en Santé MINSANTE

Prof. Anne-Cecile Bissek

Chers formateurs et participants venus de différentes structures enrôlées dans des activités de recherche sur la personne humaine notamment :

- CRENC, CBCHB, EGPAF,
- Le MINSANTE à différents niveaux de la pyramide sanitaire,
- Les Universités.

Soyez les bienvenus à cette journée consacrée au renforcement des capacités à **« la méthodologie de la recherche »**.

Le réseau CAM-HERO qui vous invite, a été mis sur pied en Octobre 2020, il réunit une centaine de chercheurs juniors et seniors, des organisations de recherche, les Universités, le CNLS, La DLMEP à travers la Sous-Direction du VIH/IST-TB et les autorités de régulation de l'éthique de la recherche impliquant les sujets humains (le CNERSH et la DROS).

L'édition 2024 de CAM-HERO qui débute ce jour est prévue en deux phases :

1. En premier lieu cet Atelier de formation ciblant les jeunes chercheurs. Il est à noter qu'il s'agira de la 2ème promotion qui aura bénéficié de ce privilège.
2. Suivra, la conférence scientifique sur la thématique du VIH, pour laquelle vos résumés ont déjà été retenus, l'occasion est idoine pour restituer les résultats de vos travaux.

Chers participants,

Cette formation est déterminante pour pérenniser une production scientifique de qualité et fiable dans le domaine du VIH. Elle se déroulera en une journée, comportant trois articulations assorties d'objectifs spécifiques à savoir :

1. Formulation d'une question de recherche et conception d'un protocole ;
2. Choix de la méthodologie de la recherche en fonction du type de recherche ;
3. Introduction aux statistiques et à la rédaction scientifique.

Les enseignements seront dispensés par des professionnels reconnus dans le domaine. Je vous appelle donc à être assidus. Le but final de cette formation est de renforcer vos capacités en vous fournissant des bases permettant d'élaborer et mettre en œuvre un projet de recherche scientifiquement soutenable et respectant les normes.

Mesdames et Messieurs,

Permettez-moi de renouveler ma gratitude au réseau CAM-HERO pour cette initiative et d'adresser mes compliments aux formateurs qui ont bien voulu sacrifier leur précieux temps pour transmettre leur savoir à cette occasion.

Sur ce, je vous souhaite à tous des travaux fructueux.

Je vous remercie.

Prof. Anne-Cecile Bissek

Words from the Country Director of EGPAF,

Dr. Patrice Tchendjou

Dear Authorities of the Ministry of Public Health

Dear Directors of Institutions and Distinguish guests

Dear researchers and scientists

Dear Participants at the 4th Session of CAM-HERO- AIDS Conference,

On behalf of The Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), I am happy to welcome you to the CAM-HERO 2024 Edition. This conference is the current powerful platform in Cameroon which bring together delegates from all the regions of Cameroon and experts mobilized in Cameroon / Africa to exchange about their recent work and achievements regarding the HIV science. Ultimately, scientists come together to continuously build high quality scientific evidence and advance the fight against HIV/AIDS.

EGPAF is a proven leader in the global fight to end HIV and AIDS, and an advocate for every child to live a full and healthy life into adulthood. EGPAF usually leverages on their core expertise in service delivery, capacity building, research and advocacy to comprehensively address the evolving HIV and AIDS epidemic. Most importantly for research, EGPAF is working to advance research and innovations that lead to new, improved and scalable solutions to ending HIV and AIDS.

This conference is taking place at a critical moment, when the Government of Cameroon through the Ministry of Public Health (MOH) has embraced the UNAIDS 95-95-95 goals and the Reimagining PEPFAR's Strategic Direction to address persistent gaps in HIV prevention and treatment services and to accelerate progress towards epidemic control.

EGPAF has joined CAM-HERO initiative to working in close collaboration with other MOH and NACC partners such as CDC, CRENC, CBCHS to continuously support the MOH/NACC efforts in continuously producing high-quality evidences that will properly inform interventions which are effective for the populations we are serving. In addition, EGPAF strongly believes that out of this extraordinary gathering will emerge opportunities that will strengthen research capacities as well as networking to accelerate response to remaining gaps.

You are all welcome at the CAM-HERO 2024 conference and I hope that we will have rich moments of sharing.

Sincerely,

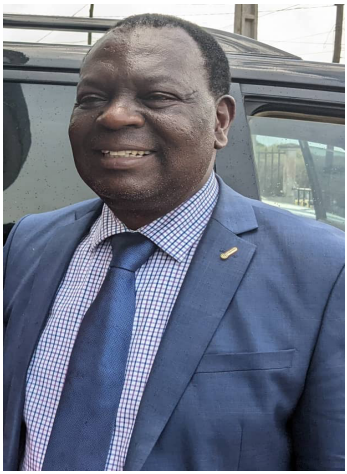
Dr Patrice Tchendjou, MD, PhD

Country Director - EGPAF

Words from the Director of CBCHS,

Prof. Tih Pius Muffih

Dear Conference attendees, I want to join the rest of the organizers to sincerely welcome you to this important conference which provides an opportunity for us to discuss HIV research activities and opportunities in Cameroon as well as showcase some of the work going on in the field. It is an exciting moment and a learning opportunity for us all. Cameroon is a big consumer of research that leads to policies and guidelines for HIV implementation. Though actively involved in some research activities, there is a big need to generate more findings that reflect our context and could inform national policies and strategies. New HIV policies and guidelines are informed by research findings from Africa but hardly from Cameroon because of our limited research activities. It is therefore critical that we do more research for our own use while contributing to existing scientific knowledge.



CBCHS has been involved in some research activities but desires to do more. We recognize the need to strengthen research activities but have several challenges including lack of funding, busy schedules, and limited capacity. We joined CAM-HERO immediately we learned about it because it is a great learning opportunity, it reminds us of the need to do more research, and also motivates the staff who can submit and present abstracts. It is therefore a very important opportunity, and we hope that many more people will get involved so that together we can promote and do more research in Cameroon. As an organization, we hope to invest more in research and are currently setting up a research department that will have specific targets to achieve each year, as well as coordinate and regulate research activities within the CBCHS.

I welcome you all oncemore to the CAM-HERO 2024 research conference and hope that we will have a very fulfilling time during the three days in Douala.

Sincerely,

Prof. Tih Pius Muffih, CAMPHIA 2024 Country Director.

Words from the Executive Director / PI of CRENC-IeDEA

Prof. Anastase Dzudie

Dear All,

Welcome to the 4th Edition of the CAM-HERO Conference on HIV Science. This platform continues to be a vital opportunity to share ideas, foster collaborations, and address key challenges in HIV/AIDS research and care in Cameroon.

As we navigate the ever-evolving landscape of HIV science, it has become increasingly evident that collaboration is our most powerful tool to tackle complex research and implementation challenges. At CRENC, we firmly believe that research is a cornerstone of our country development and must remain a key priority. Through CAM-HERO, we aim to:

1. Support the government in defining a dynamic research agenda, identifying national priorities, and establishing a National Research Registry.
2. Foster dialogue and resource sharing between researchers, regulatory authorities, and key stakeholders such as the Cameroon National Ethics Committee and the National AIDS Control Committee (NACC), under the leadership of the DROS.
3. Shape the future of HIV/AIDS research with a focus on multilevel, multidisciplinary collaborations and evidence-based solutions.

CAM-HERO also strengthens research capacity by promoting the sharing of facilities, expertise, and innovative approaches to training the next generation of researchers.

This collaborative effort ensures that early-career researchers are equipped with the knowledge and skills to lead impactful research initiatives, both nationally and globally.

As we embrace this year's theme, "Think Far, Think Wide, Think High, and Act National," I encourage all organizations to join us in advancing HIV/AIDS research through meaningful partnerships and collaboration. Together, we can drive the impactful change our communities deserve.

The entire CRENC team wishes you a wonderful 2024 CamHero meeting.

Sincerely,

Prof. Anastase Dzudie, MD, PhD, FESC, ASR

NEWS!

Establishment of the Scientific Council of the National AIDS Control Committee (CNLS)

The Ministry of Public Health has officially established the Scientific Council of the National AIDS Control Committee (CNLS) to guide evidence-based decision-making aimed at achieving the elimination of HIV in Cameroon by 2030. Under the leadership of the Minister of Public Health, this council will play a pivotal role in shaping strategic actions and ensuring alignment with national HIV elimination goals. The members include:

Nom	Poste
Prof. Anne-Cecile Bissek	Presidente
Dr Rogers Ajeh	Vice-President
Dr Joseph Fokam	Secretariat scientifique
Dr Habimana P	Secretariat scientifique
Dr Mohammed J	Secretariat scientifique
M Bakkali Taoufik	Secretariat scientifique
Pr Koulla Sinata	Conseiller Technique
Pr Alexis Ndjolo	Conseiller Technique
Pr Eugene Sobngwi	Conseiller Technique
Pr Njamnshi Alfred	Membre
Pr Penda Calixte	Membre
Pr Kouanfack	Membre
Pr Njom Nlend	Membre
Pr Tih Pius	Membre
Pr Nkenfou Celine	Membre
Pr Nguefack	Membre

Prof. Anastase Dzudie	Membre
Pr Billong Serges	Membre
Pr Pamen Joelle	Membre
Dr Patrice Tchendjou	Membre
Dr Zeh Meka	Membre
Dr Nguwoh Philippe	Membre
Dr Kob Same	Membre
Dr Ngo Nemb	Membre
Dr Nka Alex	Membre
Dr Mabongo Daniel	Membre
Dr Gankou Lienou	Membre
M. Anoubissi	Membre
M. Ndie Justin	Membre

Objectives of the meeting:

1. To Disseminate HIV research findings and HIV policy	1. Diffusion des résultats de la recherche sur le VIH/politique de santé sur le VIH
2. To foster operational research collaboration	2. Collaboration en matière de recherche opérationnelle
3. To build research capacity through Training in implementation science	3. Renforcement des capacités de recherche à travers la formation en science de la mise en œuvre
4. To discuss evidence-based strategies for solving key current challenges in the National HIV response strategy	4. Discuter des stratégies fondées sur des preuves pour résoudre les principaux défis actuels dans la stratégie nationale de réponse au VIH.

5th December 2024

Day 1: **Implementation Science Training by the Central and West Africa Implementation Science Alliance (CAWISA)**

Time	Activity	Facilitator(s)
08:30 - 09:00	Arrival, Registration and Participant Survey	Chibueze Adirieje
9:00 - 9:05	Welcome & Purpose of Workshop	Prof. Anastase Dzudie *- Chair of (CRENC)* Prof. Nadia Sam-Agudu *- Principal Investigator, CAWISA*
9:05 - 9:10	Introductions and Housekeeping Rules	Chibueze Adirieje *- Coordinator, CAWISA*
9:10 - 10:10	**Definitions and Core Principles of Implementation Science (IS)**: a. Definitions and terms (IS, IR, and Implementation Practice) b. Evidence-based Interventions (EBIs) c. Implementation Outcomes d. Implementation Strategies e. PICO/PICOT in Implementation Science	Prof. Nadia A. Sam-Agudu *- Sr. Research Faculty, and Sr. Technical Advisor, IHV-Nigeria* *- Professor of Pediatrics: Global Pediatrics and Infectious Diseases, University of Minnesota Medical School.*
10:10 - 10:20	**Q & A**	Facilitators and Participants
11:10 - 11:40	**COFFEE BREAK**	**ALL**
11:40 – 12:10	**Case Examples in IS Application** Application of IS in Research and Practice	Prof. Sam-Agudu, Facilitators and Participants
12:10 - 12:40	**Stakeholder and Community Engagement in IS**	Prof. Sam-Agudu
12:40 - 14:00	**Practical Session**: PICOT, EBIs, Strategies, Implementation and Dissemination: a. Describe health issue(s) Project Design b. PICOT c. Formulate research question(s) d. Identify EBI(s) e. Consider and select implementation strategy or strategies f. Stakeholder engagement plan Dissemination plan	Participants in small groups
14:00 - 14:30	**LUNCH**	**ALL**
14:30 - 16:00	**Group PICO Presentations and Discussions**	Facilitators and Participants
16:00 - 16:30	**Q and A, Closing Remarks, and Close**	

6th December 2024

Day 2: Plenary Sessions and Abstract Presentations

Time	Theme
07:45 – 08:15	**Reception and registration of participants** Facilitators: **Jordanne Ching / Raissa Bonboye**
08:15 – 08:30	**Welcome and introduction of participants** (10 mins) Speakers: Prof. Anastase Dzudie (CRENC-IeDEA), Dr Patrice Tchendjou (EGPAF) & Dr Eveline Mboh (CBCHB) Rapporteurs : **Gabriel Mabou / Lorraine Guedem**
08:30 – 09:30	**Abstract session 1: Basic Science and Innovations in Diagnostics** **Panel 1**: Prof. Tih Pius (CBCHS), Dr Boris Tchounga (EGPAF), Dr. Tshimwanga Edouard (CBCHS) • Organizers: **Dr Peter Ebasone / Dr Emile Shu** • Timekeeper: **Luma Ngonga**
08:30 – 08:45	Abstract 236: **In-silico design of a Multi-epitope vaccine candidate against HIV** Presenter: Tangan Yanick Aqua Stong (University of Buea)
08:45 – 09:00	Abstract 261: **High Prevalence of Archived NNRTI-Associated Drug Resistance Mutations in Vertically HIV-1 Infected Adolescents on ART in Cameroon** Presenter: Leslei Kenou Djionang (CIRCB)
09:00 – 09:15	Abstract 315: **A field evaluation of the performance of the duo test HIV/Syphilis SD BIOLINE in Cameroon** Presenter: Jean Pierre Yves Awono Noah (DROS / MINSANTE)
09:15 – 09:30	Abstract 325: **Molecular epidemiology of human papillomavirus circulating in African countries according to HIV status, systematic review and meta-analysis** Presenter: Moko Fotso Larissa Gaelle (CIRCB)
09:30 – 10:30	**Abstract session 2: Clinical Science and Treatment Monitoring** Panel 2: Dr. Joseph Fokam (CNLS / MINSANTE / CIRCB), Dr Patrice Tchendjou (EGPAF), Dr. Pascal Atanga, (CBCHB) • Organizers: **Dr Peter Ebasone / Dr Emile Shu** • Timekeeper: **Luma Ngonga**
09:30 – 09:45	Abstract 269: **Mental health troubles among Cameroonian adolescents perinatally infected with human immunodeficiency virus** Presenter: Francis Ateba Ndongo (DROS / MINSANTE)
09:45 – 10:00	Abstract 284: **Predictive efficacy of dual therapy combining integrase strand transfer inhibitors with second-generation non-nucleoside reverse transcriptase inhibitors following HIV-1 treatment failure in Cameroon** Presenter: Roland Ulrich Wome Basseck (CIRCB)
10:00 – 10:15	Abstract 307: **Three-years outcome after genotyping-guided switch in HIV multi-drug resistant patients in Cameroon: Evidence-based strategies for achieving epidemic control in low-and middle-income countries** Presenters: Magnilack Kuete Chanelle (University of Buea)

10:15 – 10:30	Abstract 326: **Evaluation de la charge virale chez les enfants et adolescents infectés par le VIH sous trithérapie à base de dolutegravir à Douala** Presenter: Ange Vanelle Pamegni Ndonko (Université de Douala, Cameroun)

10:30 – 10:45	**Opening of the meeting (10mins)** Speaker: Prof. Anne Bissek (DROS / MINSANTE)
10:45 - 11:00	**Coffee break**
11:00 – 12:15	**Abstract session 3: HIV Prevention and Implementation Sciences** Panel 3: Prof. Nadia Sam-Agudu (CAWISA / IHVN), Dr. Ajeh Rogers (UCS/MINSANTE), Dr ZEH MEKA Albert (CNLS / MINSANTE) Organizers: Dr Peter Ebasone / Dr Emile Shu Timekeeper : Jordanne Ching
11:15 – 11:30	Abstract 257: **Determinants of HIV retesting among people living with HIV: A cross-sectional study in the North West Region** Presenter: Eugene Chiabi (CBCHB)
11:30 – 11:45	Abstract 262: **Community engagement of pregnant women in the north region of Cameroon: influence of knowledge toward the prevention of mother-to-child transmission of HIV (PMTCT)** Presenter: Alhadji Zakari Yaou (Délégation Régionale de la Santé Publique du Nord, Cameroun)
11:45 – 12:00	Abstract 270: **Acceptability of pre-exposure prophylaxis among adolescents and young men who have sex with men and sex workers in Cameroon: a contribution to preventing HIV infection** Presenter: Ndié Justin (MINSANTE)
12:00 – 12:15	Abstract 311: **MENSTAR APPROACH: An integrated community strategy to reach men with HIV testing services in the Northwest Region** Presenter: Eugene Chiabi (CBCHB)
12:15 13:15	**Lunch break** (50 mins)
13:15 - 15:30	**Plenary sessions**
13:15 - 14:15	**Plenary Session I:** Sustainability in the HIV Response in Cameroon Chairs: Prof. Bissek Anne Cecile (DROS / MINSANTE), Prof. Tih Pius (CBCHS), Dr. Ajeh Rogers (UCS/MINSANTE)
13:15 - 13:30	1. Universal Health Coverage in HIV Response: Strategic integration of HIV services within UHC frameworks in Cameroon (20 mins): Dr. MINTOP Desire Anicet (Coordo, CTN/CSU)
13:30 – 14:00	2. Leveraging Implementation Science for HIV Sustainability: Optimizing program outcomes through evidence-based approaches. (20 mins): Dr. FOKAM Joseph (Permanent Secretary, CNLS)
14:00 – 14:15	**Panel Discussions (30 mins)** Key Discussants: Prof. **Anastase Dzudie** (CRENC-IeDEA), Dr **Patrice Tchendjou** (EGPAF),
14:15 – 15:30	**Plenary Session II:** Eliminating Vertical HIV Transmission and Optimizing Pediatric HIV Care **Chairs**: **Dr Patrice Tchendjou (EGPAF),** Dr. **FOKAM Joseph** (CNLS / MINSANTE),

14:15 – 14:30	1. Status of Pediatric HIV Response in Cameroon: An overview of current achievements and gaps (15 mins): Dr ZEH MEKA Albert Franck (Deputy Permanent Secretary, CNLS)
14:30 – 14:45	2. Challenges in PMTCT Programs: Barriers and strategies (15 mins). Dr Talla Sandrine (EGPAF)
14:45 – 15:00	3. Pediatric Surge Project Findings (15 mins). Dr KETCHAJI Alice (DLMEP / MINSANTE)
15:00 – 15:30	**Panel Discussions (30 mins)** Discussants: **Dr Boris Tchounga (EGPAF), Dr Eveline Mboh (CBCHB)**
15:30 – 18:00 pm	**Late breaking abstracts (LBA)** **Chairs: Prof. Anastase Dzudie (CRENC-IeDEA), Dr Patrice Tchendjou (EGPAF), Dr. Florence Tumasang (CBCHB)** Organizers : Dr Peter Ebasone / Dr Emile Shu Timekeeper :Raissa Banboye
15:30 – 15:45	**LBA 1: CAMPHIA** Presenter 1: Dr Eveline Mboh (CBCHB)
15:45 – 16:00 pm	**LBA 2:** Research and Policy Advocacy Presenter 2: Dr Ajeh Rogers (UCS/MINSANTE)
16:00 – 16:15 pm	**LBA 3:** Biological monitoring of people living with HIV at the Douala General Hospital approved treatment center in Cameroon from January to December 2023 Presenter 3: Dr. Elodie Teclaire NGO-MALABO (DGH / FHS-UB)
16:15 – 16:45 pm	**Questions and answer session (20 mins)**
16:45 – 17:00 pm	**Closing remark of day one** Chair: Prof Anne Bissek
17:00	**CLOSING**

7th December 2024

Day 3: Plenary Session and Abstract Presentations

Time	Theme
7:45 - 8:15	**Reception and registration of participants** Facilitators: **Ching Jordanne / Raissa Banboye**
8:15 - 8:30	**Day two report and adoption** Rapporteurs : **Gabriel Mabou / Lorraine Guedem**
8:30 - 09:45	**Plenary session 3: Integration of Care for Communicable and Non-Communicable Diseases** **Chairs: Prof Anne Bissek (DROS), Dr Fokam Joseph (CNLS),** • Organizers: **Dr Peter Ebasone / Dr Emile Shu** • Timekeeper : **Luma Ngonga**
08:30–08:45	1. Triple Elimination of HIV, Syphilis, and Hepatitis B: Synergistic approaches, especially among pregnant women and vulnerable populations (15 mins). Dr Boris Tchounga
08:45–09:00	2. Burden of NCDs in HIV Patients: Research on the intersection of HIV and NCDs, and models for integrated care (15 mins). Pr Anastase Dzudie (CRENC-IeDEA)
09:00–09:15	3. Stengthening Health systens through integation and gaining efficiency (15 mins): Dr Rogers Ajeh (UCS / MINSANTE)
09:15–09:45	**DISCUSSIONS (30 mins)**
09:45 – 11:10	**Plenary session 4: Ethics, Law, and Practical Realities in Research Approvals in Cameroon** **Chairs: Prof Anne Bissek (DROS), Prof. Wilfried Mbacham (CNERSH),** Prof **Pius Tih**
	A. **Understanding the New Medical Research Ethics Law in Cameroon: Implications for Stakeholders**
09:45–09:55	1. Research participant protection: the implication of the new Research Law (10 mins) -- NGU Paul (DROS / MINSANTE)
09:55–10:05	2. Reinforcement of participant protection by the law: sanctions (10 mins) - NGU Paul (DROS / MINSANTE)
	B. **Overcoming Barriers to Efficient Study Initiation in Cameroon**
10:05–10:20	1. *The Researcher's Reflection and Expectation* - Insights into researchers' perspectives on study initiation timelines and expectations from the review process (15 mins): Gabriel Mabou (CRENC-IeDEA) & Lorraine Guedem (EGPAF)
10:20 – 10:30	2. *Experience from the Ethics Committee* - Ethics committee insights on challenges and strategies to expedite study approvals (10 mins): Prof. Wilfried F. Mbacham (CNERSH)
10:30 – 10:40	3. *Experience from the DROS* (10 mins): - Prof Anne Bissek (DROS),
10:40 – 11:10	**DISCUSSIONS** (30 mins)**:** *Open floor for audience engagement through questions, panel responses, and shared solutions.*
11:10 – 12:10	**Coffee break & chat – Moderated poster session (06 posters)** **Moderators: Dr Boris Tchounga (EGPAF), Dr. Tshimwanga Edouard (CBCHS), Dr Peter Ebasone**

	Abstract **248: Low prevalence of HIV in the Northern Cameroon: contribution of some AIDS restriction genes and potential implications for gene therapy** Presenter: Djataou Patrice (University of Yaounde I,Cameroon)
	271: **Association between Mental Disorders with detectable viral load and poor adherence to antiretroviral therapy among adolescents infected with human immunodeficiency virus on follow-up at Chantal Biya Foundation, Cameroon** Presenter: Francis Ateba Ndongo (University of Garoua, Cameroon,)
	Abstract 272: **A Community-based peer-facilitated psychological and social support model to improve retention in care among Cameroonian adolescents perinatally infected with human immunodeficiency virus: a randomized controlled trial** Presenter: Jean Pierre Yves Awono Noah (DROS / MINSANTE)
	Abstract 292: **Effects of systematic HIV testing at antenatal clinics and retesting for verification on case identification and testing yield in the West, Southwest and Northwest Regions of Cameroon** Presenter: Nshom Emanuel Mboh (CBCHB)
	Abstract ID: **316** Title: **Perception of key stakeholders on the implementation and feasibility of combined HIV-syphilis (SD Bioline HIV/syphilis Duo) test in pregnant women in Cameroon** Presenter: Jean Pierre Yves Awono Noah (DROS / MINSANTE)
	Abstract 332: **Prevalence and Factors Associated with Menopause Among Adult Women Living with HIV in Cameroon** Presenter: Judith Nasah Lainsi (CRENC-IeDEA)
12:10 – 12:50 pm	**CAMHERO Awards** **Chairs: Prof. Richard Njock (MINSANTE), Prof Anne Bissek (DROS), Prof. Wilfried Mbacham (CNERSH)**
12:50-13:00 pm	**Closing Remark by *the Secretary General of the Ministry of Public Health*** Family photo 2
13 :00 -14 :00	**Lunch and Departure**

ORAL ABSTRACTS

Abstracts Selected for Oral

Presentation

ID 236: Biological monitoring of people living with HIV at the Douala General Hospital approved treatment center in Cameroon from January to December 2023

Elodie Teclaire NGO-MALABO[1,2], Jean-Pierre NDA MEFO'O[1,3], Daniel WANGSO WANLAO[1], Abigael TEMB[1], Céline NGOUNOU[1], Madeleine NGO NGUE[1], Marie Thérese NGO NSOGA[4], Anastase DZUDIE[4], Cécile OKALLA EBONGUE[1,3], Henry NAMME LUMA[4,5]

Authors' affiliation

1. Clinical Biology Laboratory, Douala General Hospital, Cameroon
2. Microbiology and Parasitology Department, Faculty of Science, University of Buea, Cameroon
3. Biological Sciences Department, Faculty of Medicine and Pharmaceutical Sciences, University of Douala, Cameroon
4. Internal Medicine Unit, Douala General Hospital, Cameroon
5. Faculty of Medicine and Biomedical Sciences, University of Yaoundé I, Cameroon

Background:
The 95-95-95 targets of UNAIDS remains a major challenge for countries in the fight against HIV. In Cameroon, the creation of approved treatment centers has made it possible to optimize the monitoring of these indicators. This study aim to evaluate the biological follow-up of patients at the approved treatment center of Douala General Hospital.

Methods
From January to December 2023, a retrospective study was conducted on patient data. In the medical record, socio-demographic (age and sex), clinical (line, start of treatment, molecules administered and viral load eligibility) and biological (HIV viral load results (HIV-VL)) data were collected. Only data from patients eligible for VL in 2023 were used and all duplicate data were excluded. Statistical analyses were performed using SPPS 22.0 software.

Results
Data from 2075 patients were collected with the sex ratio of 0.55. The median age was 49 years (IQR 42-58) with the majority of >50 age (52.8%; 1095/2075). New infections accounted for 5.6% (117/2075) and all these patients were put on treatment. Most patients (92.5%; 1919/2075) were on first-line treatment, and the most commonly administered triple therapy was TDF/3TC/DTG (76.5%; 1587/2075). At the end of 2023, 3.4% patients (70/2075) had been stop treatment, 4.6% (96/2075) had been transferred, 1.5% (32/2075) had died, 29.2% (606/2075) lost VL analyzed, and 61.3% (1271/2075) were compliant white VL done. Among compliant patients, 84.0% (1068/1271) had an undetectable HIV-VL and 16.0% (203/1271) detectable VL. In the detectable HIV-VL, 77.3% (157/203) had a suppressed VL (VL<1000 copies/mL).

Conclusion
This study provides 100% of news HIV infections detected and put on treatment. However, efforts need to be made to increase compliance in order to reduce the number of viral loads not suppressed or not performed within the eligibility window, as well as the percentage of patients lost to follow-up.

Keys Words: Approved treatment center, Douala General Hospital, HIV Viral load.

ID 236: IN-SILICO DESIGN OF A MULTI-EPITOPE VACCINE CANDIDATE AGAINST HIV

Tangan Yanick Aqua Stong*, Shey Robert Adamu, Cabirou Mounchili Shintouo

University of Buea | tangan.yanick@ubuea.cm
Basic Science and Innovations in Diagnostics

Despite several control efforts since the emergence of the first case in the 1980s, the world has still not been able to vanquish the global AIDS epidemic. With an estimated over 39 million persons, currently living with HIV, antiretroviral drugs (ARVs) have been the sole approach to control.

Since ARVs are often associated with several side effects, an HIV vaccine may need to prompt strong responses from immune cells to prevent infection with HIV. Unfortunately, vaccine trials so far have returned unfruitful results, possibly due to their inability to induce effective cellular, humoral, and innate immune responses. A multiepitope vaccine against HIV would be an invaluable addition to current control efforts.
In this study, several B-cell and T-cell epitopes key viral proteins from different strains were combined with built-in TLR4 agonist adjuvant together as well as PADRE and TAT peptides to create a multi-epitope vaccine candidate which was predicted to have high antigenicity and immunogenicity.

Immune simulation analyses showed that the vaccine candidate can elicit both humoral and cellular immune responses against HIV. Conservation of the selected proteins and predicted epitopes suggests that the generated chimera could be helpful for cross-protection across different virus strains. The 3D structure was predicted, refined, and validated using bioinformatics tools. Protein-protein docking of the chimeric vaccine candidate with the TLR4 predicted efficient binding. Further experimental validation of the vaccine construct is needed to confirm its efficacy and safety in vivo.

This study provides a promising approach for the design of multi-epitope vaccines against HIV and other infectious diseases. Overall, the constructed multi-epitope vaccine candidate demonstrated antigenicity superior to current treatment against HIV.

Keywords: *chimeric antigen, vaccine development*

ID 261: High Prevalence of Archived NNRTI-Associated Drug Resistance Mutations in Vertically HIV-1 Infected Adolescents on ART in Cameroon

Georgia Ambada, Aubin Nanfack*

**Chantal Biya International Reference Center for research on the prevention and management of HIV/AIDS, Yaoundé, Cameroon* | ambadag@yahoo.com
Basic Science and Innovations in Diagnostics

Background:
The persistence of HIV-1 in latent reservoirs poses a significant challenge to eradicating HIV-1 infection. Despite antiretroviral therapy (ART), pro-viral DNA remains in viral reservoirs. The aim of our study was to characterize the HIV-1 drug resistance mutations archived in cellular reservoirs of ART-treated adolescents vertically infected with HIV in the Centre Region of Cameroon.

Methods:
We collected samples from vertically infected adolescents living in Yaoundé and surroundings. We assessed the immuno-virological response to ART and identified the most prevalent archived drug resistance mutations in reservoirs using amplification refractory mutation system-polymerase chain reaction (ARMS-PCR). Statistical analyses were performed using Graphpad Prism, with Pearson's Chi-Square test for association between categorical variables and Spearman's Chi-Square test for correlations. A p-value < 0.05 was considered statistically significant.

Results:
The study included 40 adolescents, mostly male (55%), with a median age of 15.5 years. Median CD4 count was 639 cells/mm3, and the median plasmatic viral load was 40 copies/ml. The most prevalent archived mutation was K103N, an NNRTI-associated mutation (28/40 or 70%), followed by M184V, an NRTI-associated mutation (11/40 or 27.5%). A significant association (p=0.0001) was observed between plasmatic viremia and archived mutations in the reservoirs (HIV-1 pro-viral DNA).

Conclusion:
Despite effective ART with successful immunological and virological responses, our study found a high proportion of archived NNRTI-associated drug resistance mutations in vertically HIV-1 infected adolescents in Cameroon. These findings call for a swift transition to ART regimens excluding NNRTIs, as recommended by WHO, to ensure long-term successful management of vertically HIV-1 infected adolescents in our settings.

Keywords: ARMS-PCR, Adolescents, HIV-1 reservoirs

ID 315: A FIELD EVALUATION OF THE PERFORMANCE OF THE DUO TEST HIV/SYPHILIS SD BIOLINE IN CAMEROON

Awono Noah Jean Pierre Yves*, Ndié Justin, Francis Ateba Ndongo, Djomo Nzaddi Audrey Raïssa, Dongmo Micheline, Palisson Tatiana, Bonyohe Martial , Naah Tabala Félicité, Ketchaji Alice, Djoukwe Rina Estelle , Madjo Léopoldine, Mayap Eugénie, Bayiha Christian, Hadja Cherif , Mulluh Clifford , Keugoung Basile , Billong Serge, Ateudjieu Jérôme, Zoung-Kanyi Bissek Anne Cécile

*DROS/MINSANTE, Media Convergence Consulting Office | anjpy2002@yahoo.fr

Basic Science and Innovations in Diagnostics

Background: The fight against mother-to-child transmission of HIV, syphilis and hepatitis B is a priority for the Cameroon government. The availability of combined rapid diagnostic tests (RDTs) for these three diseases is helping to achieve this triple elimination. The aim of this study was to evaluate the performance of a combined HIV and syphilis screening test (SD Bioline HIV/syphilis Duo) in Yaoundé and Douala, Cameroon.

Material and method: This ethically approved cross-sectional study (N° 2022/08/1478 CE/CNERSH/SP) was conducted from 03 to 29 June 2023, in 74 health facilities (selected according to their ANC weight) in 15 Health Districts of the cities of Yaoundé and Douala. The study population consisted of pregnant women (PWs) of unknown HIV and syphilis status, aged 15 years and over, recruited by accidental sampling in ANC and maternity wards. Parallel and serial combinations of the Détermine, Oraquick, TPHA and VDRL tests were used as a reference to assess the sensitivity and specificity of the Duo test on venous blood samples. Inter-operator reproducibility of the Duo test was assessed between trained maternity/ANC staff and those in the health facility laboratories using Cohen's Kappa (K).

Results: For HIV, out of 4108 PWs with a median age of 27 years, 1.46% were positive, with similarities between Yaoundé (1.47%) and Douala (1.45%). Sensitivity was 83.6% (95%IC:73.2-90.4) and specificity was 99.4% (IC95%:99.1-99.6); reproducibility was moderate with K=0.586 (95%IC:0.266-0.267) and p=0.0000. For syphilis, 0.24% of 1228 PWs were positive. Sensitivity was 100% (IC95%:38.0 - 100) and specificity was 99.8% (IC95%:99.4 - 100); reproducibility was poor with K=0.170 (95%CI:0.1695-0.1704), p=0.0000. None of the PWs had been screened for co-infection with HIV and syphilis.

Conclusion: The value of using the SD Bioline HIV/syphilis Duo combined test lies in its ability to detect syphilis when it is performed by the technician laboratory.

Keywords: duo HIV/syphilis test, sensitivity, specificity

ID 325: MOLECULAR EPIDEMIOLOGY OF HUMAN PAPILLOMAVIRUS CIRCULATING IN AFRICAN COUNTRIES ACCORDING TO HIV STATUS, SYSTEMATIC REVUE AND MATA ANALYSIS

Larissa Gaelle Moko Fotso*, Michel Carlos Tommo Tchouaket, Aude Christelle Ka'e, Ezechiel Ngoufack Jagni Semengue, Alex Durand Nka, Samuel Martin Sosso1, Rachel Kamgaing Simo, Bouba Yagai, Collins Chenwi, Aissatou Abba, Nadine Fainguem, Hugues Germain, Lum Forgwein, Vincent Mekel, Sando Zacharie, Adiogo Dieudonné, Charlotte Charpentier, Valentine Marie Ferrée, Carlo-Federico Perno, Vittorio Colizzi, Joseph Fokam

*CHANTAL BIYA International Reference Centre For Research on HIV/AIDS prevention and Management | ambunka@pedaids.org
Basic Science and Innovations in Diagnostics

Introduction: Africa is the continent most affected by human papillomavirus (HPV), the main agent responsible for cervical cancer. The aim of our systematic review was to determine the epidemiology of circulating HPV types from different anatomical sites and the factors associated with the occurrence of cervical cancer in African countries.

Methods: A systematic review and meta-analysis of studies was conducted from January 2013 to December 2023 in Africa on HR-HPV (High Risk- Human Papillomavirus), lesions grading, and determinants, as per diagnostic methods used. Following the search strategy, R software version 3.6.0 was used for the meta-analysis, with $p<0.05$ considered statistically significant.

Results: 38 studies carried out in Africa were selected, including 24,417 participants (mean age 37). The overall prevalence of HR-HPV was 42.01% in the general population, and 49.8% in HIV-positive populations, versus 21.2% in HIV-negative populations. In HIVpositive individuals, 14 HR-HPV genotypes were identified, the most prevalent being HPV 16 (31.58%), 18 (26.32%), 31 (26.32%) and 33 (23.69%). In contrast, only 12 types of HRHPV were identified in HIV-negative individuals, the most prevalent genotypes being 16 (13.16%), 33 (15.79%), 35 (10.53%) and 45 (13.16%). According to the risk of CC occurrence, high-grade squamous intraepithelial lesions (HSIL) were 37.5% (9/24) in HIVpositive women versus 12.5% (3/24) in HIV-negative women, OR=3.800 [0.872-16.553], p=0.096. According to the HPV typing methods, On the 38 studies the most commonly used were Roche Linear Array® HPV (31.07%), multiplex PCR (23.7%), Hybrid Capture II (10.5%), AnyplexII28 (5.3%). Several sample types were used, with a predominance of 57.89% (22/38) cervical samples, 23.7% (9/38) biopsies, 7.89% (3/38) oropharyngeal and anal samples, 7.89% (3/38) vaginal samples and 2.63% (1/38) blood samples.

Conclusion: The high genetic diversity of HR-HPV is greater in the HIV-positive population than in the HIV-negative population. This genotypic diversity of HPV means that management depends on HIV serostatus.

Keywords: Africa, genotyping, high risk human papilloma virus

ID 269 : MENTAL HEALTH TROUBLES AMONG CAMEROONIAN ADOLESCENTS PERINATALLY INFECTED WITH HUMAN IMMUNODEFICIENCY VIRUS

Francis Ateba Ndongo, Rogacien Kana, Marius Tchassep Nono tchassep, Jean-Pierre Yves Awono Noah, Patrice Ndzie, Mathurin Cyrille Tejiokem, Emmanuelle Hopp Biheng , Justin Ndie, Tatiana Avang Nkoa, Alice Ketchaji , Joelle Bouba Pamen, Calixte Ida Penda , Anne-cecile Zoung-Kani Bissek , Paul Olivier Koki Ndombo, Hubert Mbassi Hawa, Marc Lallemant, Albert Faye

*University of Garoua, Cameroon, Centre Mère-enfant, Fondation Chantal Biya, Yaounde, Cameroon, Ministry of Public Health, Yaounde, Cameroun | atebfranc@gmail.com

Clinical Science and Treatment Monitoring

Introduction: Adolescents living with HIV are more likely to experience mental health challenges compared to their peers who do not have HIV. However, there is a lack of data regarding the mental health of adolescents living with HIV in Cameroon. This study aimed to estimate the prevalence and the factors associated with depression in adolescents infected with HIV in a Cameroonian referral hospital.

Methods: This was a cross-sectional study which enrolled adolescents perinatally infected with HIV, aged 10−19 years, on antiretroviral treatment and cared for at “Centre Mere et Enfant de la Fondation Chantal Biya”, Yaounde, Cameroon. Structured questionnaires, including validated French versions of the Coopersmith Child Depression Inventory (CDI), the Multidimensional Anxiety Scale for Children (MASC) and the Coopersmith Self Esteem Inventory (SEI), were administered to the study participants by the healthcare providers.

Results: All in all, 302 adolescents were recruited in the study at a median age of 15.2 years (interquartile range : 12.0 − 17.5), including 159 (52.7 %) girls. Both parents had died for 57 (18.9 %) adolescents ; only the father was alive for 64 (21.2 %) ; only the mother was alive for 48 (15.9 %), both parents were alive for 133 (44.0 %). This study found prevalence of 26.5 % for severe depression, 36.4 % for suicidal ideation, 29.1 % for high/very high anxiety, and 20.5 % for low self-esteem. No factor was found significantly associated with severe depression but there was a trend towards decreased risk of severe depression among adolescents whose mother was alive [OR= 0.4 (0.1−1.0), p = 0.084].

Conclusion: This study found that mental health troubles were elevated among Cameroonian adolescents perinatally infected with HIV. Services and systems should go beyond clinical management of HIV and address the psychosocial and mental health of adolescents.

Keywords: Adolescents perinatally infected with HIV, Assessment, Mental health

ID 284: PREDICTIVE EFFICACY OF DUAL THERAPY COMBINING INTEGRASE STRAND TRANSFER INHIBITORS WITH SECOND GENERATION NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS FOLLOWING HIV-1 TREATMENT FAILURE IN CAMEROON

Davy-Hyacinthe Gouissi Anguechia, Yagai BOUBA, Ezechiel NGOUFACK JANGNI SEMENGUE , Aude KA'E , Roland Ulrich BASSECK WOME, Désiré TAKOU, Collins CHENWI AMBE, Grace BELOUMOU, Alex Durand NKA, Maria-Mercedes SANTORO, Francesca CECCHERINI-SILBERSTEIN, Adawaye CHATTE, Carla MONTESANO, Giulia CAPPELI, Vittorio COLIZZI, Alexis NDJOLO, Dora MBANYA, Nicaise NDEMBI, Carlo-Federico PERNO, Joseph FOKAM

**Chantal BIYA International Reference Centre for research on HIV/AIDS prevention and management, Yaounde, Cameroon*| davygouissi@gmail.com

Clinical Science and Treatment Monitoring

Background: Dual therapies (DT) combining integrase inhibitors (INSTIs) with second generation non-nucleoside reverse transcriptase inhibitors (2nd-gen-NNRTIs) offer new possibilities for HIV treatment to improve adherence. However, drug resistance mutations (DRMs) to prior antiretrovirals may jeopardize the efficacy of DT. We herein describe the predicted efficacy of DT combining INSTIs+2gen-NNRTI following treatment failure among Cameroonian patients.

Methods: A laboratory-based study with 130 patients experiencing virological failure was carried out at the Chantal Biya International Reference Centre (CIRCB), Yaoundé- Cameroon. We genotyped *HIV-1 Reverse transcriptase (RT)* and *integrase (INT)* gene by Sanger sequencing and assessed acquired HIV-1 drug resistance (ADR) mutations, in patients failing treatment from February -2019 to December -2023.We characterized the effect of ADR mutations on the predicted susceptibility to dual therapy combining second generation NNRTIs/INSTIs using Stanford HIVdb algorithm. Statical comparison was performed using the chi2-and fisher test.

Results: Of the 130 participants with successful genotypic resistance testing (59.2% female, 38 [27-46] years), DRMs to NNRTIs and INSTIs were found at 92.3% and 1.5%, respectively. Prevailing DRMs were Y181C (32.3%) among 2nd-gen-NNRTIs and R263K (0.7%) among INSTIs. Among 2nd-Gen-NNRTIs, etravirine, doravirine and rilpivirine had 43.85%, 41.54%, and 38.46% preserved efficacy respectively. Among INSTIs, we found 97.69% efficacy for bictegravir/dolutregravir, 96.15% for cabotegravir and 92.31% for elvitegravir/raltegravir. Overall predictive efficacy of DT was lower among participants who failed 1st-en-NNRTI ($p<0.001$); and etravirine+(dolutegravir or bictegravir) showing the highest score (43.8%).

Conclusion: There are high levels of NNRTIs-RAMs and low-level of INSTI-RAMs among patients failing ART in Cameroon. Consequently, the efficacy of dual therapy combining INSTIs and 2nd-Gen NNRTIs might be suboptimal for most patients with history of ART failure in low- and middle-income countries. Thus, the use of long-acting injectable RPV+CAB in such context should be genotypic-guided for optimal outcomes.

Keywords: Dual therapies; predictive efficacy; Cameroon

ID 307: THREE-YEARS OUTCOME AFTER GENOTYPING-GUIDED SWITCH IN HIV MULTI-DRUG RESISTANT PATIENTS IN CAMEROON: EVIDENCE-BASED STRATEGIES FOR ACHIEVING EPIDEMIC CONTROL IN LOW-AND MIDDLEINCOME COUNTRIES

*Ezechiel Ngoufack Jagni Semengue, Magnilack Kuete Chanelle, Njouendou Abdel Jelil, Collins Ambe Chenwi, Vincent Kamaël Mekel, Kenfack Dell-Dylan, Pamela Patricia Tueguem, Désiré Takou, Grâce Beloumou Angong, Sandrine Claire Djupsa Ndjeyep, Naomi-Karell Etame, Evariste Molimbou, Alex Durand Nka, Tekoh Tatiana, Derrick Tambe Ayuk Ngwese, Moko Gaelle, Aude Christelle Ka'e, CarloFederico Perno, Nicaise Ndembi, Joseph Fokam, Alexis Ndjolo

*Chantal Biya International Reference Center for research on HIV/AIDS Management and Care (CIRCB) |ezechiel.semengue@gmail.com

Clinical Science and Treatment Monitoring

Background: Monitoring of HIV-infected patients with long-term treatment remains challenging in low- and middle-income countries (LMICs) due to risks of multi-class HIV drug resistance (HIVDR). Following a personalized strategy, we sought to evaluate the treatment response among patients with multi-class HIVDR following genotypic resistance guided switch in Cameroon.

Methodology: A cohort-study was conducted in the South-west region of Cameroon among patients failing non-nucleoside reverse transcriptase inhibitors (NNRTI)-based and protease inhibitor (PI)-based antiretroviral treatment (ART) from 2018-2023. Following HIV-1 genotypic resistance testing (GRT), patients were switched to most-effective therapies and viral load (VL) was monitored after 3-, 6-, 12-, 24-, and 36-months. Data analysis used Epi Info v.7.2, with $p<0.05$ considered statistically significant.

Results: From the 336 patients failing ART in the region, 170 (50.6%) presented with GRT results; from these, 72 were further lost-to-follow-up, 12 died and 5 defaulters, giving 81 study-inclusions (57.5% females; 47/81). Before GRT, about 64.2% (52/81) were failing PIbased and the median CD4 and VL were 232.5 [161.25–401.25] cells/µL and 54,480 [13,932.5–220,153] copies/mL respectively. The most prevailing mutations at inclusion were M184I/V (26.1%), K103N/S (20.7%) and M46I/L (32.8%) for NRTI, NNRTI and PI respectively; with CRF02_AG as the prevailing viral clade (71.4%). Following GRT, 92.6% (75/81) of the participants respected the recommended regimen. Viral suppression (VL<1000copies/ml) post-GRT was 80% at 3-months, 84.8% at 6 months, 81.4% at 12 months, 93.7% at 24months and 86.7% at 36 months. Neither gender, nor age, baseline regimens, CD4 and VL, GRT profiles, were found to be associated with participants' therapeutic outcome (all p-values >0.05).

Conclusion: Our findings show high rates of VL suppression following GRT-guided switch in individuals harboring HIVDR mutations. This underscores the significance of personalizing ART management for difficult-to-treat people to achieve HIV control by 2030 in LMICs

Keywords: antiretroviral therapy, genotypic-guided treatment switch, multi-class drug resistance

ID 326: EVALUATION DE LA CHARGE VIRALE CHEZ LES ENFANTS ET ADOLESCENTS INFECTES PAR LE VIH SOUS TRITHERAPIE A BASE DE DOLUTEGRAVIR A DOUALA

Pr Ida Calixte Penda*, Dr Grace Dalle Ngondi, Mme Ange Vanelle Pamegni Ndonko

*Département des Sciences Cliniques Faculté de Médecine et des sciences Pharmaceutiques, Université de Douala, Douala, Cameroun | idapenda@yahoo.fr

Clinical Science and Treatment Monitoring

Introduction : La réponse virologique chez les enfants et les adolescents infectés par le VIH sous traitement antirétrovirale reste un défi dans les contextes à ressources limitées. Le Cameroun a adopté le Dolutégravir comme traitement de première et deuxième ligne. Le but de notre étude était d'évaluer la suppression virologique chez les enfants et les adolescents infectés par le VIH sous trithérapie à base de Dolutégravir à Douala.

Méthodologie : Une étude de cohorte menée de Janvier à Juin 2024 auprès des participants âgés de (0-19ans) infectés par le VIH et suivis dans trois centres de santé dans la région du littoral. Les données sociodémographiques et cliniques ont été collectées puis la charge virale a été réalisée à partir la plateforme Abbott. Des modèles de régression logistique chi carré et binaire multivariés ont été utilisées pour identifier les facteurs associés à la suppression virologique avec une $P < 0,05$ considéré comme significative.

Résultats : Au total 326 participants ont été inclus dans notre étude (57 enfants et 269 adolescents.). La plupart 94,8% (309/326) ont été contaminés par transmission verticale. Le sexe féminin représentait 52,8% (172/326) tandis que 47,2% (154/326) étaient de sexe masculin ($p = 0,28$). Les patients sous protocole à base de TDF/3TC/EFV avaient une fréquence de 62,3% et 70,8% après la transition. La proportion globale de suppression virologique (CV < 1000 copies/ml) 24 mois après l'introduction de Dolutégravir était de 99,1% et 93,3% des participants présentaient une virémie indétectable (CV < 50 copies/ml).

Conclusion : Le taux élevé de suppression virologique dans cette étude est encourageant à l'ère des objectifs de l'ONUSIDA 95/95/95 et indique que des progrès supplémentaires sont nécessaires pour étendre les schémas thérapeutiques pédiatriques à l'aide de Dolutégravir.

Mots-clés : Enfants et adolescents ; suppression de la charge virale ; Dolutégravir

ID 257: DETERMINANTS OF HIV RETESTING AMONG PEOPLE LIVING WITH HIV: A CROSS-SECTIONAL STUDY IN THE NORTH WEST REGION

Eugene Chiabi*, Jude Berenynuy Cholong, Yungsi Peter Nsah, Fozao Vanessa Mbi, Ngueiwoh Franklin Nkengafac, Kuni Esther Bonje, Mboh Khan Eveline, Kum Walters Kang, Albert Bakor Beteck, Monju Johnson Vishi, Tih Pius Muffih

*Cameroon Baptist Convention Health Services | eugenechiabi@gmail.com

HIV Prevention and Implementation Sciences

Background: The proportion of known positive cases among newly diagnosed HIV patients has been on the rise as Cameroon works towards achieving epidemic control. Understanding the determinants of this behavior may aid in the development of interventions to reduce it. We aimed to assess the reasons and factors associated with HIV retesting among people living with HIV.

Methodology: This was a cross-sectional mixed methods survey among 800 conveniently sampled patients, receiving ART in four high volume HIV clinics in the North West Region from 1st to 31st August 2023. We estimated the prevalence of retesting and elicited reasons for retesting. Chi Square test was used to assess the relationship between retesting and the independent variables. Logistic regression analysis in SPPS version 24.0 was used to identify predictors of re-testing.

Result: Prevalence of retesting among participants was 26.6% with a higher prevalence observed among PLHIV in the urban setting (31.9%) compared to those in the semi-urban setting (16%). Reasons for retesting included confirmation of cure after prayers 89 (39%), uncertainty about diagnosis 53(24.9%), health worker request 31(14.6%), perception of good health 28(13.1%), confirmation of cure after suppressed viral load 9(4.2%), premarital VCT 5(2.3%), and confirmation of cure from alternative treatment 4(1.9%). In bivariate analysis using chi square age (p=0.04), facility setting (p=0.001), religion/denomination (p=0.002), level of education (p=0.02) and occupation (p=0.005) were significantly associated with retesting. In multivariate analysis patients using a facility in an urban setting were about 3 times more likely to retest, AOR= 2.7 (95%CI:1.8, 4.1), while younger patients (21-40 years) were about 2 times more likely to retest, AOR=1.9 (95%CI:1.3, 2.7).

Conclusion: HIV retesting is common among PLHIV in this setting. Routine monitoring of retesters is recommended for de-duplication of new HIV diagnoses

.**Keywords**: HIV, prevalence, retesting

ID 262: COMMUNITY ENGAGEMENT OF PREGNANT WOMEN IN THE NORTH REGION OF CAMEROON: INFLUENCE OF KNOWLEDGE TOWARD THE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV (PMTCT)

ALHADJI ZAKARI YAOU*, Sébastien Ledoux DOUKA, Jean Pierre Yves Awono Noah, Justin Ndie , Alice Ketchadji , Anne Cécile Bissek Zoung-Kanyi

*Délégation régionale de la santé publique du Nord, Cameroun|doukaseba@yahoo.fr

HIV Prevention and Implementation Sciences

Introduction: In 2023, globally 44% of all new HIV infections were among women and girls (all ages). In Sub-Saharan Africa, women and girls (all age) accounted for 62% of all new HIV infections. In Cameroon, 15,434 pregnant women were identified as HIV+ and 3.3% of their children were HIV+.

Objective: To assess the influence of knowledge in community engagement of pregnant women toward the PMTCT of HIV in North region of Cameroon.

Methods: A cross-sectional study was conducted at 20 hospitals in the Bibemi and Garoua health districts in June 2024. Data were collected using a PMTCT knowledge scale, sociodemographic, obstetrical and an attitude questionnaire, which were administered through face-to-face to 326 voluntary pregnant women in antenatal care (ANC). Descriptive statistics, univariate and multivariate hierarchical binary logistic regression with 1000 samples bootstrap were performed using SPSS 27. Multivariate analysis included only significant variables (P<0.05) from the univariate analysis.

Result: The median age was 29, 68% had no income, 77% were living with a partner. The overall knowledge score was 0.28, indicating that 38% demonstrated good knowledge of PMTCT; 54% expressed willingness to engage in HIV control interventions but 13% had already done so. Factors positively associated with this community engagement, were knowledge of PMTCT (B=3.32), age (B=0.2), number of pregnancies (B=0.93), number of ANC performed (B=0.51) but the number of living children (B= -1.14) was negatively associated. The bootstrap analysis showed a positive association between interesting outcome and predisposition to HIV interventions (B =19.06; 95%CI Bca: 17.78-21).

Conclusion: This study revealed a low level of good knowledge and community engagement with PMTCT of HIV among ANC attendees. This finding also suggests that there is a need to improve the knowledge of PMTCT for pregnant women attending ANC in order to increase their engagement and use of PMTCT services.

Keywords: Cameroon., Knowledge of PMTCT, Pregnant women

ID 270: ACCEPTABILITY OF PRE-EXPOSURE PROPHYLAXIS AMONG ADOLESCENTS AND YOUNG MEN WHO HAVE SEX WITH MEN AND SEX WORKERS IN CAMEROON: A CONTRIBUTION TO PREVENTING HIV INFECTION

Ndié Justin*, Awono Noah JP Yves, Ateba Ndongo Francis, Kana Dongmo Rogacien, Tabala Naah Félicité, Jean De Dieu Anoubissi, Zacheaus Zeh Akiy, Albert Zeh Meka, Carolle Dognmo Temgoua, Wepnyu Njamsnhi Yembe, Martial Bonyohe, Yvette Ndjatte Heuya, Gildas Nguemkam, Iris Kouoh, Edith Temgoua, Joseph Fokam, Jérôme Ateudjie, Zoung-Kanyi Bissek Anne Cécile

*Division de la Recherche Opérationnelle en Santé, Ministère de la Santé Publique, Centre de Recherche en Santé de MédiaConvergence | ndjust2002@yahoo.fr

HIV Prevention and Implementation Sciences

Background: The use of pre-exposure prophylaxis (PrEP) as a complementary prevention strategy for HIV infection remains low in Cameroon.

Objective: The aim of this study was to assess the acceptability of PrEP among adolescents and young men who have sex with men (MSM) and sex workers (FSW) in Cameroon.

Methods: A cross-sectional study was conducted among adolescents and young MSM and FSW aged 18-24 years, recruited consecutively from 17 to 28 July 2023 in 14 communitybased organisations (CBOs) in 05 towns (Yaoundé, Douala, Bafoussam, Bamenda and Bertoua) in Cameroon. The variable of interest 'acceptability of PrEP' was measured using a 05-point Likert scale recoded as an ordinal variable (No-Neutral-Yes), with modalities 1 to 2 classified as 'No', 3 as 'Neutral' and 4 to 5 as 'Yes'. Numerical variables were described using the median (IQR) and categorical variables using proportions. Logistic regression was used to identify factors associated with acceptability (95% CI). These analyses were performed using Excel 2016 and SPSS 22 software.

Results: A total of 393 adolescents and young MSM and FSW were enrolled at a median age of 22 years (20-24); the 21-24 age group was in the majority (70.7%), and 62.6% had secondary education. Overall, 76.4% of FSW and MSM adolescents and young people, including 72.2% of MSM and 79.2% of FSW, agreed to use PrEP if it was available. There was no significant difference between age and acceptability of PrEP (p=0.5). However, acceptability of PrEP among adolescents and young MSM and FSW was significantly associated with the city of Yaoundé (aOR=12.9; p=0.032) and negatively associated with not attending school (aOR=0.038; P=0.004).

Conclusion: The acceptability of PrEP among adolescents and young FSW and MSM is moderate in Cameroon. Stepping up awareness-raising and communication campaigns aimed at these at-risk groups will help to increase the acceptability of PrEP.

Keywords: Cameroon, FSW, MSM, PrEP, acceptability

ID 311: MENSTAR APPROACH: AN INTEGRATED COMMUNITY STRATEGY TO REACH MEN WITH HIV TESTING SERVICES IN THE NORTHWEST REGION

Chiabi Eugene, Akendoh Ronald Titah, Yungsi Peter Nsah, Cholong Jude Berenyuy , Ijang Noela, Keng Vitalis, Kuni Esther Bonje, Mboh Eveline Khan, Kum Walters Kang, Monju Johnson Vishi, Tih Pius Muffih

*Cameroon Baptist Convention Health Services| eugenechiabi@gmail.com

HIV Prevention and Implementation Sciences

Background: Low male testing and treatment rates increase HIV transmission to female partners and affect their partners, families, and communities. Men-centered approaches are needed to overcome barriers to the uptake of services along the HIV continuum of care for men. We present an integrated community-based approach to increase the uptake of HIV clinical services by men.

Description: Between October to January 2024, 37 focal persons selected from 37 PEPFAR supported sites in the NW were trained on men-friendly strategies including the provision of an integrated package of health services in the community. A community register was developed and the focal persons received training on how to use it. Video spots on Undetectable=Untransmittable (U=U) message were produced in English/French and translated by local language experts into pidgin, Lamso, Kom and Mankon vernaculars. Male influencers were engaged and mentored to mobilize men in their social groups for the provision of these services. The package of services included, sensitization on U=U, condom distribution, HIV testing, screening for hypertension (HTN), diabetes (DM), TB, sexually transmitted infections (STIs) and activities were implemented from February to September 2024.

Lessons learned: Out of 402 outreaches planned 353 were conducted**.** A total of 61 male influencers were engaged, mentored on the U=U message and used to mobilize men in different settings. A total of 30 men's groups were reached. Video spots on U=U in pidgin and some local languages were also shared in 30 whatsapp groups. A total of 9320 men were reached with HIV testing services 3771 (40%) were tested with 27 positive cases identified and 26 (96%) enrolled on ART. See table 1 for screening outcomes of hypertension, diabetes, TB and STIs.

Conclusion: An integrated package of health services for men in the community is a feasible and effective approach to increase the uptake of HIV testing services among men.

Keywords: Menstar approach, integrated services

POSTER ABSTRACTS

Abstracts Selected for Poster Presentation

ID 248: LOW PREVALENCE OF HIV IN THE NORTHERN CAMEROON: CONTRIBUTION OF SOME AIDS RESTRICTION GENES AND POTENTIAL IMPLICATIONS FOR GENE THERAPY

DJATAOU Patrice*, Marceline Ngounoue Djuidje, Nkenfou Tchinda Ngeufeu carine, Elise Elong, Aline Tiga, Joel Kadji Kameni, Moussa Djaouda, Alexis Njolo, Nkenfou Nguefeu Celine

*Biochemistry department, Faculty of Science, University of Yaounde I, Yaounde, Cameroon|djataouprince@yahoo.fr

Background: HIV infection and its progression to AIDS depend on several factors including host genetic factors that can modulate this process. Worldwide, Cameroon not exempted, the frequency of AIDS-restricted genes varies and may influence this prevalence. The North and Far North Regions of Cameroon have had the lowest HIV prevalence in the country for many years despite risky behaviours given their unique customs and habits. In this work, we seek to explore the contribution of host genes to the HIV low prevalence in these regions.

Methods: Five genes previously described as HIV AIDS related were studied. These genes are: CCR5Δ32, CCR5pro59029A/G, CCR2-64I, SDF1-3'A and Trim5α(136Q). A total of 384 participants were included in this study after obtaining their informed written consent. Blood sample was collected from each participant. The HIV serological status was confirmed using national algorithm. Genomic DNA was extracted from the buffy coats and used for genotyping. The results obtained were compiled in Epi Info 7.1 and snpStats software and Chi 2 tests allowed us to compare the frequencies of the AIDS related alleles in the North with those in other Regions of Cameroon and to measure the impact of these ARGs on protection against the acquisition of HIV.

Results: The frequency of protective alleles CCR5Δ32, CCR5pro59029A/G, CCR2-64I, SDF1-3'A andTrim5α(136Q) was 0.52%; 37.56%; 36.46%; 25.19% and 69.33% respectively. These allelic frequencies exhibited a significant difference when compared to those obtained in other regions of Cameroon ($P < 0.01$). Protective alleles were predominant in the Northern region have been strongly associated with resistance to the prevalence of HIV [($P<0.001$); OR=2.02 CI, 95% (1,31-2,72)].

Conclusion: The study of these host genetic restriction factors is of great value in the design of a practical cure for HIV infection or an effective vaccine, particularly in light of the development of new techniques for gene therapy.

Keywords: AIDS restricted host genes, HIV, Northern Cameroon, genes therapy, risk factors, surveillance.

ID 271: ASSOCIATION BETWEEN MENTAL DISORDERS WITH DETECTABLE VIRAL LOAD AND POOR ADHERENCE TO ANTIRETROVIRAL THERAPY AMONG ADOLESCENTS INFECTED WITH HUMAN IMMUNODEFICIENCY VIRUS ON FOLLOW-UP AT CHANTAL BIYA FOUNDATION, CAMEROON

Francis Ateba Ndongo, Rogacien Kana, Marius Tchassep Nono tchassep, Jean-Pierre Yves Awono Noah, Patrice Ndzie,| Mathurin Cyrille Tejiokem, Emmanuelle Hopp Biheng, Justin Ndie, Tatiana Avang Nkoa, Alice Ketchaji, Joelle Bouba Pamen, Calixte Ida Penda, Anne-cecile Zoung-Kani Bissek, Paul Olivier Koki Ndombo, Hubert Mbassi Hawa, Philippe Msellati, Marc Lallemant, Albert Faye*

*University of Garoua, Cameroon, Centre Mère-enfant, Fondation Chantal Biya, Yaounde, Cameroon, Ministry of Public Health, Yaounde, Cameroun|atebfranc@gmail.com

Introduction: In resource-limited settings, mental health disorders are rarely taken into account in the care offered to HIVIA. This study aimed to assess the baseline sociodemographic factors and mental health conditions associated with detectable viral load or poor ART adherence in HIVIA on ART

Methods: From December 2021 to March 2022, a cross-sectional study was conducted in randomly selected HIVIA aged 10 to 19 years at Chantal Biya Foundation. Data were collected using a questionnaire administered face-to-face by healthcare providers. The primary outcome was viral load ≥ 40 copies/mL in HIVIA on ART for at least six months. The secondary outcome was poor ART adherence, defined as ≥ 1 missed dose of antiretroviral therapy within the last past three days. Multivariate logistic regression was used at 5% significantly level to assess factors associated with outcomes of interest.

Results: In total, 302 adolescents were interviewed, 159 (52.7 %) were girls and median age was 15.2 years (IQR: 12.0−17.5). Having missed at least 1 dose of ART drugs during the last 3 days before screening concerned 53 (35.0 %) cases. Of the 247 adolescents with an available viral load (VL) in the last 12 months prior to screening, 33 (26.7 %) had a VL ≥ 40 copies/mL. Low self-esteem was strongly associated with a higher risk of poor ART adherence (aOR(95 % confidence interval (95 %CI)): 2.2 (1.1−4.3); p = 0.022). Having both parents alive (aOR (95 %CI): 0.4 (0.2−0.9); p = 0.031) or receiving ART with efavirenz or dolutegravir (aOR (95 %CI): 0.5 (0.2−0.9); p = 0.047) was strongly associated with a lower likelihood of having a detectable VL.

Conclusion: This study found that co-morbid low self-esteem had higher odds of poor ART adherence in HIVIA. Moreover, both poor ART adherence, and detectable viral load were associated with impaired life conditions in HIVIA.

Keywords: Antiretroviral therapy adherence, Mental disorders, Viral load

ID 272: A COMMUNITY-BASED PEER-FACILITATED PSYCHOLOGICAL AND SOCIAL SUPPORT MODEL TO IMPROVE RETENTION IN CARE AMONG CAMEROONIAN ADOLESCENTS PERINATALLY INFECTED WITH HUMAN IMMUNODEFICIENCY VIRUS: A RANDOMIZED CONTROLLED TRIAL

Francis Ateba Ndongo*, Jean Pierre Yves Awono Noah, Rogacien Kana, Justin Ndie, Marius Tchassep Nono, Patrice Ndzie, Mathurin Cyrille Tejiokem, Emmanuelle Hopp Biheng, Tatiana Avang Nkoa, Yacouba Aba Coulibaly, Joseph Fokam, Alice Ketchaji, Joelle Bouba Pamen, Calixte Ida Penda, Paul Olivier Koki Ndombo, Hubert Mbassi Hawa, Philippe Msellati, Marc Lallemant, Albert Faye, Annececile Zoung-Kani Bissek

*University of Garoua, Cameroon, Centre Mère-enfant, Fondation Chantal Biya, Yaounde, Cameroon, Ministry of Public Health, Yaounde, Cameroun|atebfranc@gmail.com

Background: Psychological and social support for adolescents living with HIV remains undocumented and unaddressed in Central Africa. This study aimed at assessing effectiveness of a peer-facilitated community-based support model in improving retention in care among adolescents living with HIV and attending care in Chantal Biya Foundation, Cameroon.

Materials and methods: We conducted an analysis of adolescents aged 10-19 years old, perinatally infected with HIV, on follow-up in the Day Care Unit of a reference hospital in Cameroon, and enrolled in the a randomized controlled trial. While the control arm only received routine care in the health facility, the intervention arm, in addition, was assigned to an HIV association for sustained support model, including support groups, leisure workshops and home visits. Structured questionnaires, including validated French versions of mental scales, were quarterly administered to the study participants in both study arms by trained healthcare providers. The main outcome was maintaining retention in care beyond the first 15-month period of the study start. Kaplan-Meier and Cox regression models were fitted to assess association between outcome and exposure variables. Hazard Ratio (HR) across categories of exposure variables were compared using Wald's test. Pvalue <0.05 was considered significant.

Results: In total, 305 adolescents were recruited in the study at a median age of 15.2 years old, including 162 (53.1%) girls and 153 individuals in the intervention arm. Mental disorders were prevalent: suicidal ideation (36.4%), severe depression (26.5%), high anxiety (29.1%), low self-esteem (20.5%). Probability of maintaining good retention in care beyond the first 15-month period of study start remained higher in the intervention arm (82.0% [95%CI: 73.7%-88.4%]) versus the control arm (71.0% [63.2%-78.1%]), [cHR (95%CI): 2.0 (1.1-3.3), p=0.044].

Conclusions: Capacity should be built in terms of implementing community-based peerfacilitated support groups in local organizations providing care to adolescents living with HIV

Keywords: Adolescents perinatally infected with HIV, Community-based psychological and social support, Peer-facilitation, Retention in care

ID 292: EFFECTS OF SYSTEMATIC HIV TESTING AT ANTENATAL CLINICS AND RETESTING FOR VERIFICATION ON CASE IDENTIFICATION AND TESTING YIELD IN THE WEST, SOUTHWEST AND NORTHWEST REGIONS OF CAMEROON

Nshom Emanuel Mboh, Kum Kang Walter, Keng Vitalis, Tata Emile, Desembuin Felix, Ijang Noela, Monju Johnson Vishi, Esther Kuni Bonje, Eveline Mboh Khan, Chiabi Eugene, Tih Pius Muffih

**AIDS Care and Prevention Program, Cameroon Baptist Convention Health Services, Bamenda, Cameroon*| nshomen2000@yahoo.com

Introduction: Systematic testing of pregnant women (PW) during antennal clinic is a requirement by national guidelines. Several reasons including religious belief, claims to treat HIV by traditional healers, etc contribute to some known HIV-positive people retesting for HIV. Although periodic scientific population-based surveys are conducted to determine the HIV incidence and prevalence, ongoing monitoring mostly use program data, which without thorough cleaning will be inaccurate. This study aims at demonstrating the effects of HIV systematic testing of PW and testing by known HIV-positive individuals on case identification and yield in the West, Southwest and Northwest regions of Cameroon.

Methods: This cross-sectional study used clinical tips to identify some already known HIV-positive individual who were retesting and further used the Data Manager (DAMA) software to verify all person who tested positive to ascertain that they were not already know positive on treatment by sorting and comparing using variables like name, sex, age, telephone number, etc. Further, we computed the yield excluding the data of PW from the overall testing data.

Results: From October 2023 to June 2024, a total of 135,423 individuals were tested and 4,889 were HIV-positive, representing a yield of 3.6%. After adjusting for known HIV positives who were retesting, the yield dropped to 2.7%. The yield the increased to 3.4% when the data of PW was excluded. Averagely, known HIV-positives contributed 26% to overall positives, inflating the yield by an average of 1% while the systematic testing of PW dilutes the testing yield by an average of 0.7%

Conclusion: Efforts to carefully determine a more accurate HIV testing yield are critical because it significantly contribute to programming. Identifying re-testers reduces the case identification numbers by about 26%. The use of clinical information and electronic system like DAMA are key to successfully minimizing the know positives, hence determining a more accurate yield.

Keywords: HIV retesting, Testing of pregnant women, Yield

ID 316: PERCEPTION OF KEY STAKEHOLDERS ON THE IMPLEMENTATION AND FEASIBILITY OF COMBINED HIV-SYPHILIS (SD BIOLINE HIV/SYPHILIS DUO) TEST IN PREGNANT WOMEN IN CAMEROON

Awono Noah Jean Pierre Yves, Teh Monté Caroline Sofa, Ndié Justin, Ateba Ndongo Francis, Djomo Nzaddi Audrey Raïssa, Dongmo Micheline, Palisson Tatiana, Bonyohe Martial, Naah Tabala Félicité, Ketchaji Alice, Djoukwe Rina Estelle, Madjo Léopoldine, Mayap Eugénie, Bayiha Christian, Hadja Cherif, Mulluh Clifford, Keugoung Basile, Billong Serge, Ateudjieu Jérôme, Zoung-Kanyi Bissek Anne Cécile

*DROS/MINSANTE, Media Convergence Consulting Office| anjpy2002@yahoo.fr

Background: Only half of pregnant women in Cameroon are tested for syphilis at their first antenatal care (ANC) visit. To improve syphilis testing, Cameroon has tested the SD Bioline HIV/syphilis duo in 323 facilities across eight regions with the support of 972 health providers. This study aimed to explore perceptions of stakeholders on rolling out the Duo test nationally.

Methodology: From April 2022 to June 2023, in the eight regions, sixty-three key informants were included for the study. In-depth interviews were conducted on these topics as importance of Duo test, positive and negative effects induced by the use of Duo tests, recommendations for national scale up of duo test. The interviews were conducted in French and English, recorded and transcribed before being coded and analysed with thematic approach using Atlas ti 9. This study was conducted in accordance with the ethical standards set out by the national ethical committee (N° 2022/08/1478 CE/CNERSH/SP).

Results: The Duo test is an acceptable considering its importance. Three out of five identified the Duo test as crucial for successful prevention of mother to child transmission (PMTCT) for HIV and syphilis. Half perceived that the test could also cut ANC costs for pregnant women. One in six respondents said saving time and reducing the workload were two of the most important benefits (co-occurrence coefficient: 0.29). Regarding feasability, some healthcare providers saw challenges in interpreting the Duo test results. A minority felt it reduced money spent in health care since it was free. Most believed it should be included in the national algorithm. They recommended free syphilis treatment for pregnant women.

Conclusions: These findings lend support to the integration of the Duo Test into the national algorithm for screening pregnant women, which could lead to improvements in the overall management of HIV and syphilis in the country.

Keywords : Cameroon, Duo test HIV/syphilis, Perceptions, Stakeholders

ID 332: PREVALENCE AND FACTORS ASSOCIATED WITH MENOPAUSE AMONG ADULT WOMEN LIVING WITH HIV IN CAMEROON

Judith Nasah*, Merveille Foaleng, Peter Vanes Ebasone, Anastase Dzudie

* Clinical Research Education, Netowrking and Consultancy, Cameroun| judith_nasah@crenc.org

Background: Women with HIV (WWH) may experience menopause differently from the general population, often facing accelerated onset and heightened severity of symptoms. The intersection of menopause and HIV progression remains underexplored in sub-Saharan Africa. We determined the prevalence of menopause and associated factors among WWH in the Cameroon IeDEA cohort.

Methods: We conducted a cross-sectional analysis of WWH aged 30-55 years who consented to participate at IeDEA sites in Cameroon (Bamenda, Limbe, Yaoundé) from 2016 to 2022. Women who were pregnant or had undergone hysterectomy were excluded. Menopause was defined as no menstruation for 12 months or more at enrollment. Logistic regression assessed relationships between menopause and age, marital status, alcohol use, smoking, BMI, time since HIV diagnosis, and WHO stage.

Results: Among the 7,155 women analyzed (median age: 46 years), 34.0% were postmenopausal, including 20.0% aged 30-45 years (early menopause) and 82.0% aged 46-55 years. In multivariable analysis, being widowed/divorced compared to single (aOR 3.1; 95% CI: 2.6-3.7), being obese compared to normal weight (aOR 1.5; 95% CI: 1.2-1.8), and being in WHO Stage III & IV compared to Stage I & II (aOR 1.5; 95% CI: 1.3-1.8) were associated with menopause. Similar associations were observed for early menopause: being separated/divorced/widowed (aOR 2.4; 95% CI: 2.0-3.0), being obese (aOR 1.6; 95% CI: 1.2-1.9), and being in WHO Stage III & IV (aOR 1.7; 95% CI: 1.4-2.0) were significantly associated with menopausal status.

Conclusion: Among WWH in IeDEA Cameroon, menopause prevalence was 20.0% among those aged 30-45 and 82.0% among those aged 46-55. Being divorced/widowed, in WHO Stage III & IV, and obese were significantly linked to menopause. These findings highlight a potential increased risk of cardiometabolic disease in WWH experiencing early menopause.

Keywords : ART Adherence, Cameroon, HIV, IeDEA, Menopause, Women