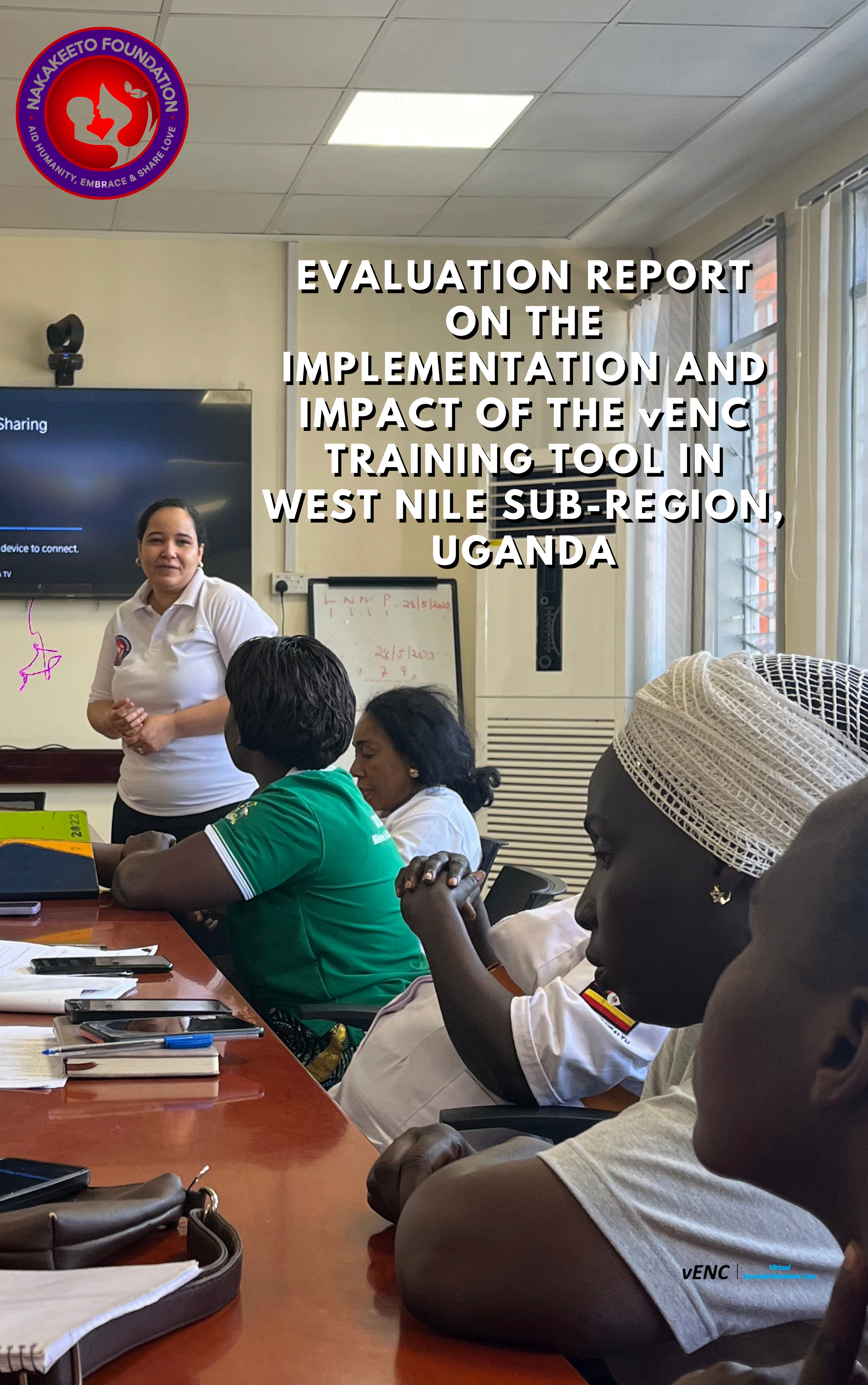




EVALUATION REPORT ON THE IMPLEMENTATION AND IMPACT OF THE vENC TRAINING TOOL IN WEST NILE SUB-REGION, UGANDA



EXECUTIVE SUMMARY

From June 29th to June 30th, 2024, we hosted a site visit by esteemed professionals Dr. Rachel Umoren from the USA and Prof. Chinyere Ezeaka from Nigeria to evaluate the implementation of the Virtual Essential Newborn Care (vENC) tool. This visit was strategically planned within a tight timeframe to accommodate our visitors' limited availability in Uganda.

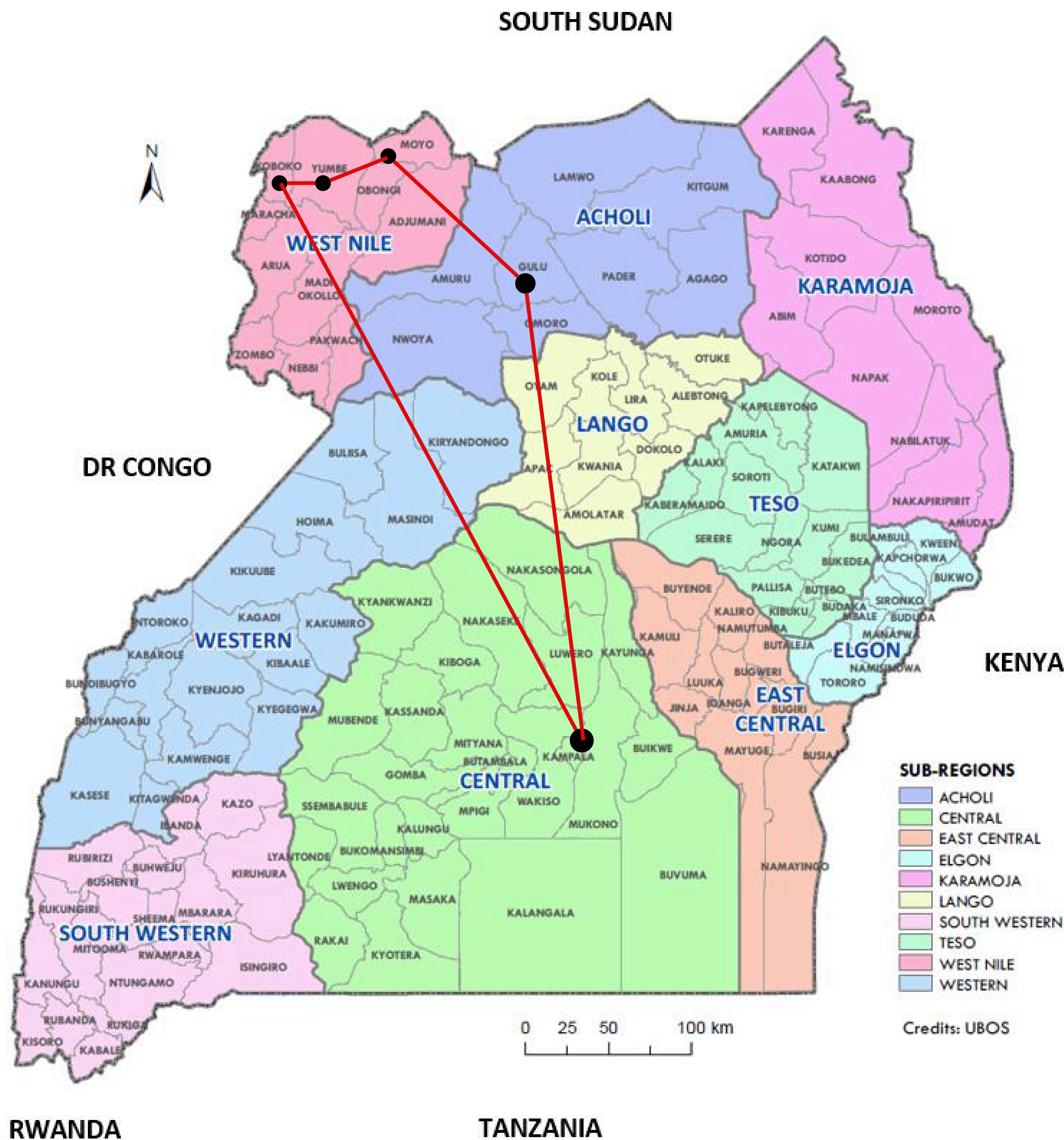
The visitors were received at Entebbe Airport at 9:00 PM on June 28th and were picked up from their hotel at 4:20 AM on June 29th to embark on a nine-hour journey to West Nile. We arrived in Moyo District at 1:20 PM and conducted our first site visit at Moyo General Hospital at 3:00 PM. After the visit, we traveled to Yumbe District, where we stayed overnight.

On the morning of June 30th, we visited Yumbe Regional Referral Hospital and subsequently Koboko General Hospital at 11:00 AM. Following these visits, we embarked on the return journey to Kampala, arriving at 11:00 PM. Our visitors were promptly taken to the airport to catch their flight back to Lagos.

This expedited visit allowed Dr. Umoren and Prof. Ezeaka to observe the vENC tool's implementation across multiple sites, providing valuable insights into its impact on newborn care in the region. Their feedback and observations will be instrumental in further refining and enhancing the effectiveness of the vENC program.



Journey Summary for vENC Site Visits



On Friday, June 28th, our esteemed guests, Dr. Rachel and Prof. Chinyere, were collected from Entebbe Airport and driven to a hotel in Kampala for a rest. Early on Saturday, June 29th, at 4:20 am, Dr. Rachel and Prof. Chinyere were picked up to embark on a journey to the West Nile region.

Our first leg of the journey involved driving 336 kilometers from Kampala to Gulu, where we collected Dr. Margaret, arriving around 10:00 am. From Gulu, we drove an additional 120 kilometers to reach Moyo, crossing the River Nile via the Lalopi ferry. We arrived in Moyo at 1:27 pm, had lunch, and proceeded to Moyo General Hospital for our first site supervision and visit at 3:20 pm.



Dr. Rachel and Prof. Chinyere crossing the River Nile on a ferry, en route to Moyo District for the vENC site visit.

At 5:00 pm, we embarked on a 68-kilometer journey to Yumbe, where we stayed overnight. Early the next morning, Sunday, June 30th, we visited the team at Yumbe Regional Referral Hospital at 8:00 am. At 11:00 am, we drove 38 kilometers to Koboko and briefly visited the Koboko General Hospital site.

Afterward, we continued to Arua District for lunch at 1:00 pm, covering a distance of 55 kilometers from Koboko to Arua. At 3:00 pm, we began our journey back to Kampala from Arua, a distance of 451 kilometers. We aimed to return on time as the guests' flight was scheduled for 3:00 am on Monday, July 1st. We arrived in Kampala at 11:00 pm and continued 41 kilometers to the airport.

Dr. Rachel and Prof. Chinyere were on time for their flight, marking the success of this site visit. We are glad that all planned sites were visited and the objectives of the visit were met.



Dr. Rachel, Dr. Margaret, Prof. Chinyere, and Henry together during the vENC site visit, showcasing collaboration and dedication to improving newborn care

INTRODUCTION

Background Information of the vENC Project

The Virtual Essential Newborn Care (vENC) project is a pioneering initiative aimed at enhancing the skills of healthcare professionals in essential newborn care through immersive virtual reality (VR) simulations. The vENC tool provides an interactive and engaging platform for midwives, nurses, and other healthcare workers to practice and refine their skills in a safe and controlled environment. The project has been implemented in various healthcare facilities across the West Nile region of Uganda, including Moyo General Hospital, Yumbe Regional Referral Hospital, and Koboko General Hospital.

The vENC project is designed to address critical gaps in newborn care by offering realistic, scenario-based training that replicates real-life clinical situations. The tool aims to improve the competence and confidence of healthcare providers in managing newborns, ultimately leading to better health outcomes for infants.





PURPOSE OF THE SITE VISIT

The primary purpose of the site visit was to assess the implementation and impact of the vENC project in the participating healthcare facilities. This involved evaluating how well the tool has been integrated into daily practice, understanding the experiences and feedback of the users, and identifying any challenges or areas for improvement.

OBJECTIVES:

1. Evaluate Implementation: To assess the extent to which the vENC tool has been adopted and integrated into the regular training and clinical practice of the participating facilities.
2. Collect Feedback: To gather qualitative feedback from the healthcare providers using the vENC tool regarding its usability, effectiveness, and relevance to their clinical work.
3. Identify Challenges: To identify any technical, logistical, or practical challenges faced by the users in utilizing the vENC tool.
4. Measure Impact: To evaluate the impact of the vENC training on the skills and confidence of healthcare providers in essential newborn care.
5. Strengthen Partnerships: To reinforce collaboration between the healthcare facilities, the Nakakeeto Foundation, and the vENC Project.

ITINERARY FOR SITE VISIT

Friday, 28th June 2024

- 9:00 PM: Arrival of Dr. Rachel A. Umoren and Prof. Veronica Ezeaka at Entebbe Airport
- 9:30 PM: Transfer to hotel in Kampala for overnight stay

Saturday, 29th June 2024

- 4:20 AM: Departure from hotel in Kampala
- 4:30 AM - 10:00 AM: Drive from Kampala to Gulu (336 km)
- 10:00 AM - 10:30 AM: Pickup Dr. Margaret Nakakeeto in Gulu
- 10:30 AM - 1:27 PM: Drive from Gulu to Moyo (120 km), crossing the River Nile by ferry at Lalopi
- 1:27 PM - 2:30 PM: Arrival and lunch in Moyo
- 3:00 PM - 5:00 PM: Site visit at Moyo General Hospital
- 5:00 PM - 6:30 PM: Drive from Moyo to Yumbe (68 km)
- 6:30 PM: Arrival in Yumbe for overnight stay

Sunday, 30th June 2024

- 8:00 AM - 10:00 AM: Site visit at Yumbe Regional Referral Hospital
- 10:00 AM - 11:00 AM: Drive from Yumbe to Koboko (38 km)
- 11:00 AM - 12:30 PM: Site visit at Koboko General Hospital
- 12:30 PM - 1:30 PM: Drive from Koboko to Arua (55 km)
- 1:30 PM - 2:30 PM: Lunch in Arua
- 3:00 PM: Departure from Arua for Kampala (451 km)
- 11:00 PM: Arrival in Kampala
- 11:00 PM - 12:00 AM: Transfer from Kampala to Entebbe Airport (41 km)
- 12:00 AM: Arrival at Entebbe Airport

Monday, 1st July 2024

- 3:00 AM: Departure of Dr. Rachel A. Umoren and Prof. Veronica Ezeaka from Entebbe Airport

Notes:

- Accommodation: Arrangements were made for overnight stays in Kampala on the 28th June and in Yumbe on the 29th June.
- Meals: Lunches were arranged at designated stops in Moyo, Yumbe, Koboko, and Arua.
- Transportation: A dedicated driver was provided for the entire duration of the visit to ensure timely and comfortable travel between the locations.
- Site Visits: Each site visit included meetings with healthcare providers, observation of the use of the vENC tool, and collection of feedback on its implementation and impact.

SITE DESCRIPTIONS

MOYO GENERAL HOSPITAL



On the 29th of June 2024, we visited Moyo General Hospital. The attendance for this site visit included 7 participants, comprised of 6 females and 1 male. The group was made up of 3 nurses and 4 midwives.

As part of the vENC project, each participant was gifted a pen, and the site champions received a bag, a book, and additional pens. The training session proceeded smoothly, featuring a comprehensive presentation on the vENC tool and its applications. Following the presentation, our visitors, Dr. Rachel A. Umoren and Prof. Veronica Ezeaka, toured the hospital facility, engaging with the staff and observing the hospital's operations.



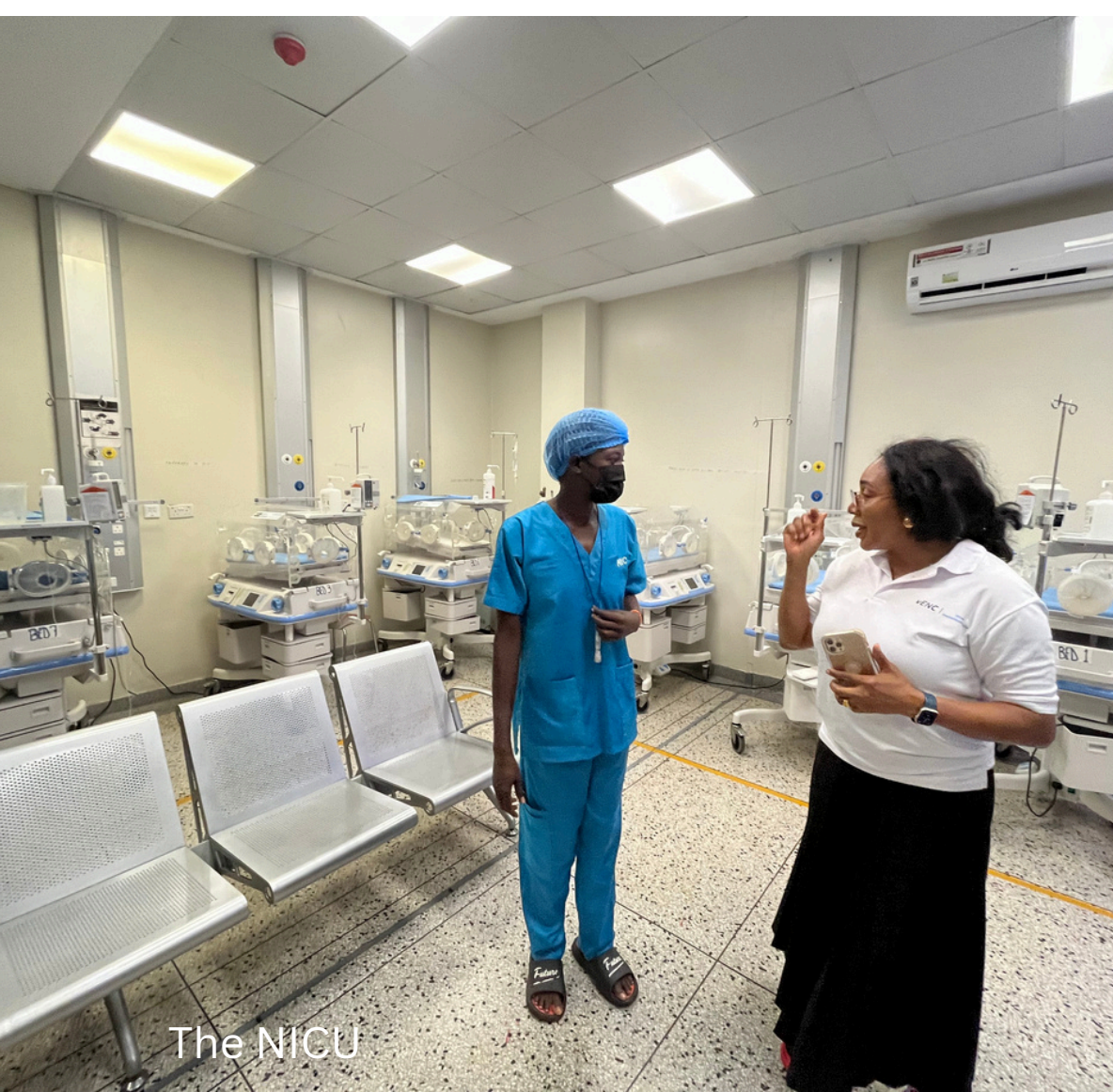
YUMBE

REGIONAL REFERRAL HOSPITAL



The visit to Yumbe Regional Referral Hospital took place on the morning of the 30th of June 2024. This session saw a larger attendance of 14 participants, including 1 male who is a doctor. The group also included 8 nurses and 5 midwives. Additionally, the Principal Nursing Officer (PNO) and a representative for the Assistant District Health Officer (ADHO) were present, underscoring the importance of this visit to the regional health leadership.

The participants were engaged in a productive session on the vENC tool, complemented by discussions on its practical applications in their daily routines. Each participant was provided with a pen, and the site champions were awarded a bag, a book, and pens as tokens of appreciation.





Our final site visit was at Koboko General Hospital on the afternoon of the 30th of June 2024. This session was attended by 6 participants, including the hospital administrator, highlighting the administration's support for the vENC initiative. The group consisted of 2 males and 4 females, with 4 nurses and 1 midwife.

During the visit, the participants were actively involved in the session, and they received pens as part of the vENC project. The site champions were also given a bag, a book, and pens to support their continued leadership in utilizing the vENC tool. The visitors conducted a walkthrough of the hospital facilities, engaging with staff and observing the impact of the vENC project on the ground.



GENERAL INFORMATION FOR SITE VISITS

Overview

The site visits to Moyo General Hospital, Yumbe Regional Referral Hospital, and Koboko General Hospital provided valuable insights into the impact and implementation of the vENC (virtual Essential Newborn Care) training tool. Across these sites, staff have demonstrated significant improvements in their ability to support newborn survival and overall care.

Impact of the vENC App

The vENC app has facilitated numerous improvements across the sites:

- **Mastery of Steps in Newborn Care:** Staff have enhanced their understanding of essential newborn care processes, leading to more effective interventions.
- **Successful Resuscitation:** There has been an improved rate of successful resuscitations, ensuring better outcomes for newborns.
- **Improved Patient Relations:** Midwives have fostered better relationships with patients, involving caretakers in birth preparations.
- **Skin-to-Skin Contact:** The practice of maintaining skin-to-skin contact for the first hour post-birth has been improved.
- **Resuscitation Equipment:** Proper checking of resuscitation equipment has been emphasized, leading to timely replacements of non-functional items.
- **Mother-Infant Communication:** Mothers receive better feedback about their babies' status, and there is increased awareness about the importance of bringing a cap for the baby's head.

Suggestions for Improvement

Participants have provided valuable feedback for enhancing the vENC app:

- **Hand Washing Steps:** Incorporating hand washing steps into the app.
- **Equipment Functionality Checks:** Including checks for the functionality of stethoscopes.
- **Context-Specific Adjustments:** Modifying scenarios where caps are not used during resuscitation, as this is not always applicable in the local setting.
- **Face Mask Adjustments:** Addressing the use of face masks based on gestational age, considering small for gestational age (SGA) infants.
- **Assistance During Bagging:** Integrating ways for assistants to help during bagging, such as checking the heart rate.
- **Phone Provision for Practice:** Providing a phone or tablet specifically for practice in NICU and maternity wards.
- **Alternative Examination Practices:** Adjusting practices to fit facilities that may not have radiant warmers.

Recommendations

To further improve the implementation and effectiveness of the vENC app, the following recommendations were made:

- **Compatibility Improvements:** Enhancing the app's compatibility with more smartphones, reducing the reliance on VR glasses.
- **Wider Rollout:** Extending the application to lower-tier facilities.
- **Regular Knowledge Checks:** Conducting regular assessments of staff knowledge on HBB (Helping Babies Breathe) steps.
- **System Adaptations:** Making modifications to fit the local health system, particularly regarding the use of radiant warmers.

Newborn Care Indicators

The use of the vENC app has led to notable improvements in key newborn care indicators:

- **Classification of Live Births:** Better classification and documentation of live births.
- **Resuscitation Rates:** Improved rates of newborn resuscitation.
- **Kangaroo Mother Care (KMC):** Enhanced KMC practices.
- **Reduced Sepsis Cases:** A reduction in newborn sepsis cases.
- **Infection Control:** Improved infection control measures, particularly hand washing practices.



OBSERVATIONS

The site visits to Moyo General Hospital, Yumbe Regional Referral Hospital, and Koboko General Hospital on June 29th and 30th, 2024, marked a significant milestone in assessing the implementation and impact of the vENC (virtual Essential Newborn Care) training tool. The dedication and commitment demonstrated by the healthcare teams at each site were commendable, reflecting a strong commitment to improving newborn care in the region.

Throughout these visits, it was evident that the vENC app has been instrumental in enhancing the skills and knowledge of healthcare professionals. Staff members have mastered crucial steps in newborn care, resulting in improved resuscitation rates, better patient relations, and enhanced infection control practices. The integration of vENC into daily practice has also fostered better communication with mothers and improved the overall quality of care for newborns.

Feedback from the site visits has been invaluable. Suggestions for app improvements, such as incorporating hand washing steps and adjusting practices to fit local settings, will guide future enhancements to ensure the tool's relevance and effectiveness. Additionally, the recommendations to expand the app's compatibility and roll it out to lower-tier facilities will help broaden its impact.

The success of these site visits underscores the importance of continuous engagement with healthcare teams and the need for ongoing support and training. By addressing the challenges identified and implementing the suggested improvements, the vENC project can further its mission of reducing newborn mortality and enhancing the quality of newborn care across the region.

CONCLUSION

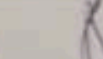
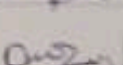
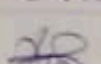
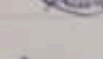
The site visits were a testament to the positive changes brought about by the vENC app. The collaborative efforts of all stakeholders, including the dedicated healthcare teams and our esteemed visitors, Dr. Rachel Umoren and Prof. Chinyere Ezeaka, have laid a strong foundation for continued success. We look forward to building on this momentum and achieving even greater strides in essential newborn care.



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