ENGAGING FOR PREPAREDNESS: A COLLABORATIVE APPROACH TO TRACK SARS COV-2 VARIANTS IN KENYA

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INTRODUCTION

The evolution of SARS CoV-2 within the human population has led to emergence of contemporary variants which have proved to be extraordinarily transmissible and capable of circumventing immune responses generated by natural infection and vaccination.

In this project we have established a robust platform for the continuous monitoring of SARS CoV-2 variants in Kenya through stakeholder engagement and collaboration so as to ensure rapid detection and characterization of new variants that emerge and determine their immune escape potential.

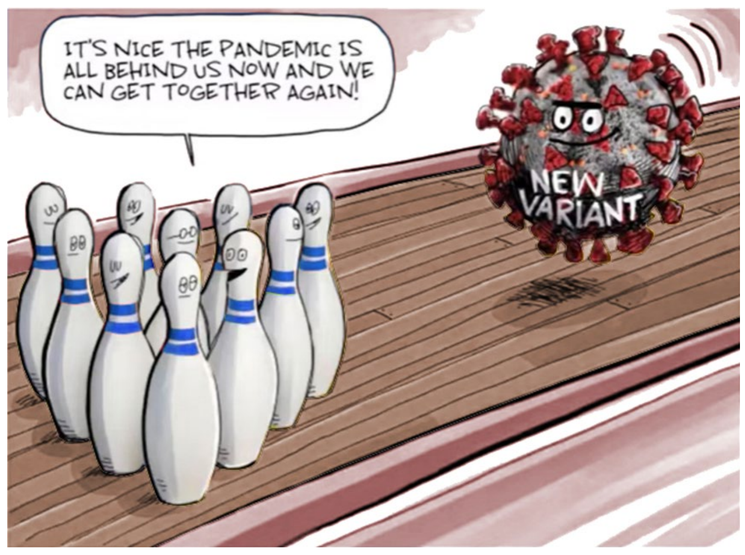

Figure 1: The SARS-CoV-2 virus exhibits high mutability, enabling it to evade host immunity, therapeutic interventions, and vaccine induced protection. (Adapted from https://www.youtube.com/watch?v=CizUbryMOOY&t=959s)

METHODS

We have convened a collaborative consortium comprising regional public health agencies like WHO Afro and Africa CDC, alongside county and subcounty departments of health within the Ministry of Health, as well as health facilities for sample collection.

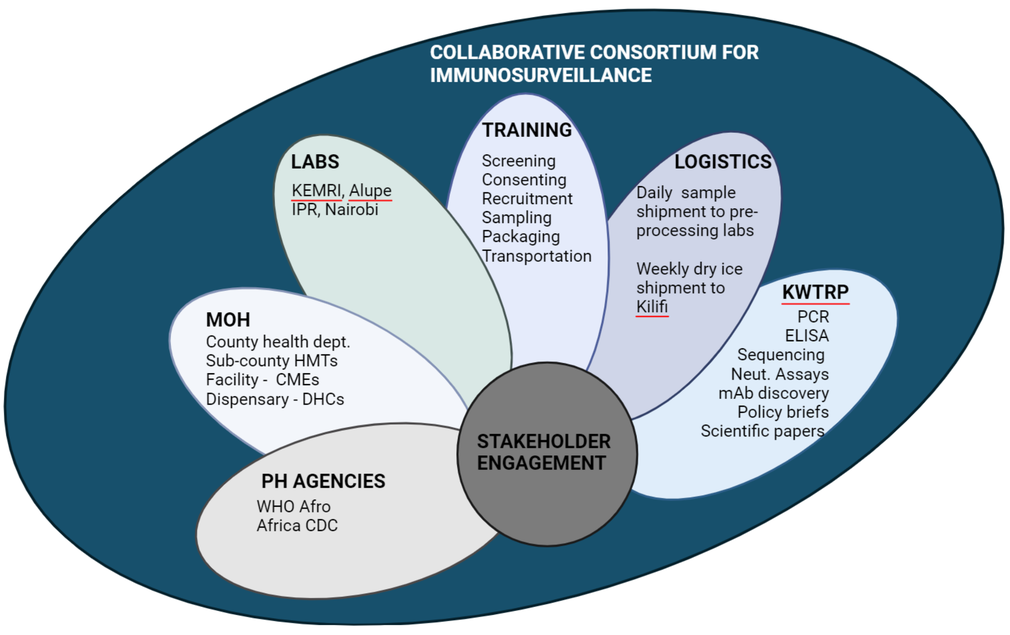

Figure 2: Collaborative consortium for immunosurveillance highlighting the key stakeholders and processes central to the engagement effort.

CONCLUSION

Stakeholder engagement has significantly enhanced surveillance of SARS CoV-2 variants in Kenya, facilitating timely data sharing and informed public health decision making.

RESULTS

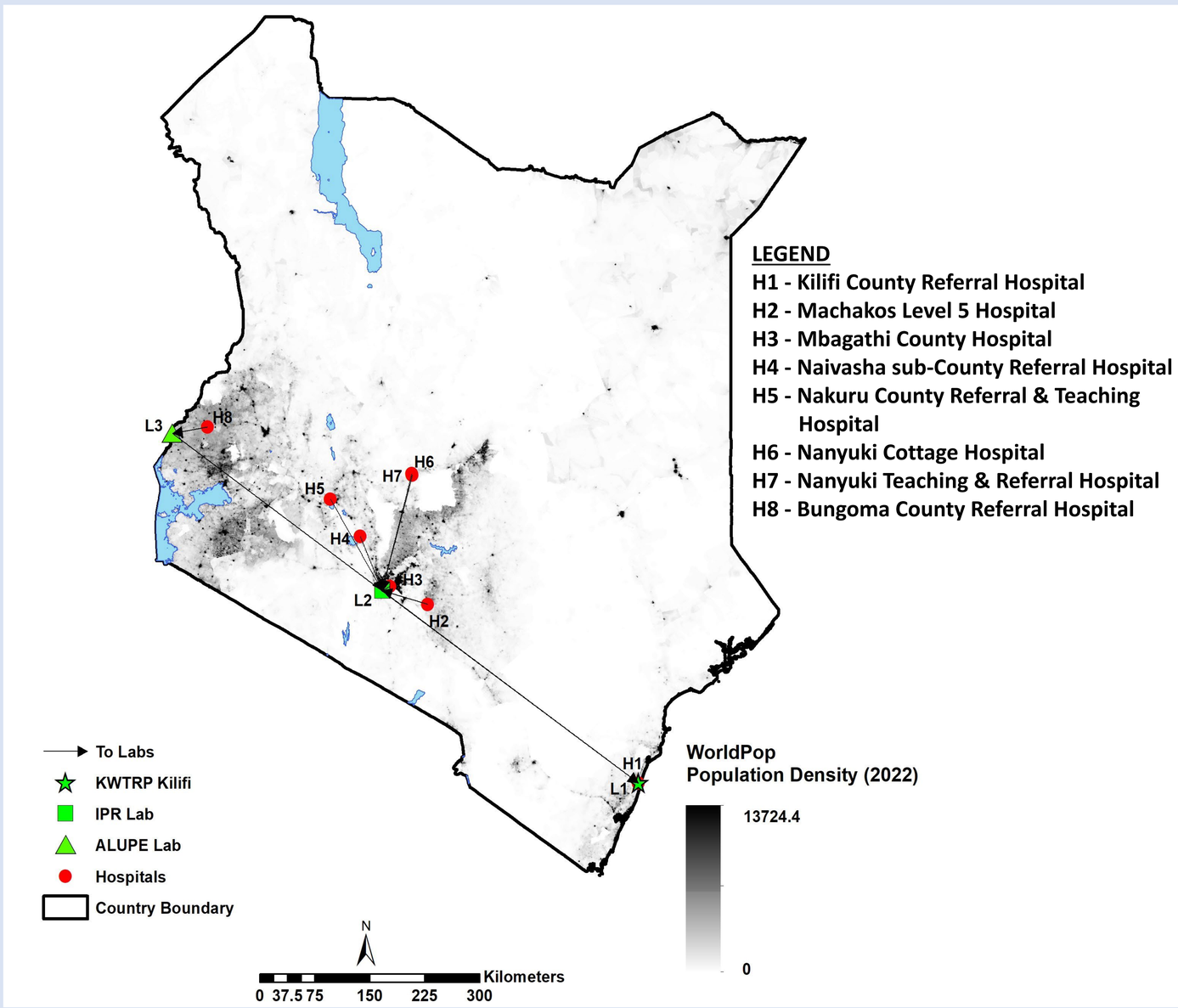

Figure 3: Geographical Map of Kenya indicating the hospital sites, sample pre-processing laboratories (IPR, Nairobi & KEMRI, Alupe) and the main facility at KEMRI-Wellcome Trust, Kilifi.

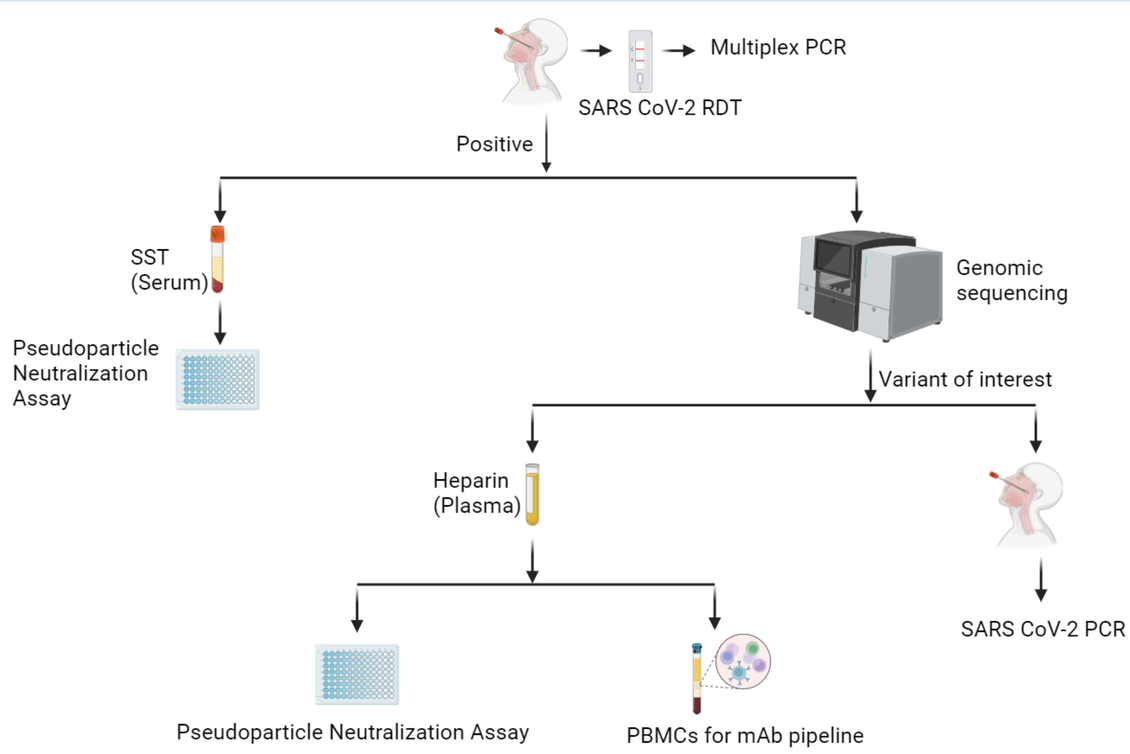

Figure 4: Schematic representation of the sample flow, from initial collection to laboratory processing and analysis.

Figure 5: CME session at Nakuru County Referral & Teaching Hospital.

Figure 6: Training workshop for study clinicians and laboratory personnel.