Dear AMMnet member,

You registered for a training to be held on Thursday, **June 26** during the AMMnet Senegal meeting. This three-hour training entitled: “***Basics: Introduction to R and data visualization”***, is scheduled to be held from 15:30-18:30 Pm with a 30-minute coffee break in the middle. Please see below for details from your trainer, Prof. Dennis. K. Muriithi.- <https://cdam.chuka.ac.ke/team.html>

**Training Overview**

This training is designed for beginners who want to learn the fundamentals of R programming and apply it to data visualization. Participants will gain hands-on experience working with a malaria dataset, learning how to analyze, and visualize data effectively.

**Duration: 3 hours**

Training Aims

1. Understand the Basics of R Programming (Data Import and Exploratory Data Analysis).
2. Develop proficiency in creating data visualizations in R using ggplot2.
3. Enhance Data Storytelling Through Visualization.
4. Introduction to Animated and Interactive Visualizations.
5. Equip participants with skills to apply R for real-world malaria data analysis.

Training Structure

A blend of interactive and hands-on methods:

1. **Presentations**: Concise theory and examples.
2. **Practical Work**: Guided coding exercises.
3. **Group Work**: Collaborative problem-solving.
4. **Discussions**: Q&A and best practices.

**Training Schedule**

**15:30–16:00 PM**: Introduction to R Programming & Exploration Data Analysis  
**16:00–17:00 PM**: Data Visualization Basics (ggplot2: geoms, aesthetics, themes etc).  
**17:00–17:30 PM**: Advanced Topics and Best Practices  
**17:30–18:00 PM**: Group Project (design a visualization from a sample dataset).  
**18:00–18:30 PM**: Presentations and Feedback,

**Preparation for the Workshop**

1. **Data:** We will provide malaria dataset for the training. Additionally, feel free to bring any other malaria datasets (in CSV format) you have previously worked on.
2. **Laptop Requirement:** Ensure your laptop (core i5 and above) is pre-installed with the latest versions of R and R Studio to facilitate participation in coding exercises.
3. Download R latest version 4.5.1 from the CRAN website:

<https://cran.r-project.org/bin/windows/base/R-4.5.1-win.exe>

1. Download RStudio from the RStudio website: <https://download1.rstudio.org/electron/windows/RStudio-2025.05.1-513.e>
2. Install the following packages:

ggplot2, tidyverse, psych, gganimate, ggpubr, ggstatsplot, patchwork, plotly, rio, gifski, easystat, GWalkR, gtsummary ,flextable, dlookr, esquisse, kableExtra, tm, wordcloud, RColorBrewer

Should you have any questions or need further information, please do not hesitate to contact us. We look forward to your active participation in what promises to be a highly rewarding and insightful training session.

**Best wishes,**