

Using Rapid Response Teams to Interrupt Mpox Transmission in Nakuru County, Dec 2024, Kenya

Author: Oscar A. Gaunya^{4*},
Co-Authors: E. Kiptoo¹, J. Kipro², A. Muange³, L. Martins³, F. Nganga⁴, S. Kadivane⁴, P. Olale⁵, A. Fidhow⁴, D. Langat⁴, M. Kamene⁴
Affiliations: 1 Nakuru County, 2 AFENET, 3 World Health Organization, 4 Kenya National Public Health Institute, 5 Kenya Red Cross.

BACKGROUND

Kenya reported its first confirmed mpox case in July 2024, with subsequent local transmission across multiple counties. Nakuru County, situated along Kenya's Northern Transport Corridor and characterized by high population mobility, emerged as a hotspot for Mpox transmission. On August 31, 2024, Nakuru County confirmed its index case involving a 37-year-old male truck driver who had recently travelled from Rwanda. The Case began experiencing symptoms on August 23, 2024, while in Mombasa. In response to evidence of sustained community transmission, the **Ministry of Health**, in collaboration with **Nakuru County** and with support from the **Kenya Red Cross Society**, deployed National Rapid Response Teams (RRTs) to strengthen surveillance, enhance outbreak control measures, and interrupt transmission.

MAIN OBJECTIVE:

- To strengthen Mpox surveillance and implement early control measures in hotspot sub-counties of Nakuru County.

Specific objectives:

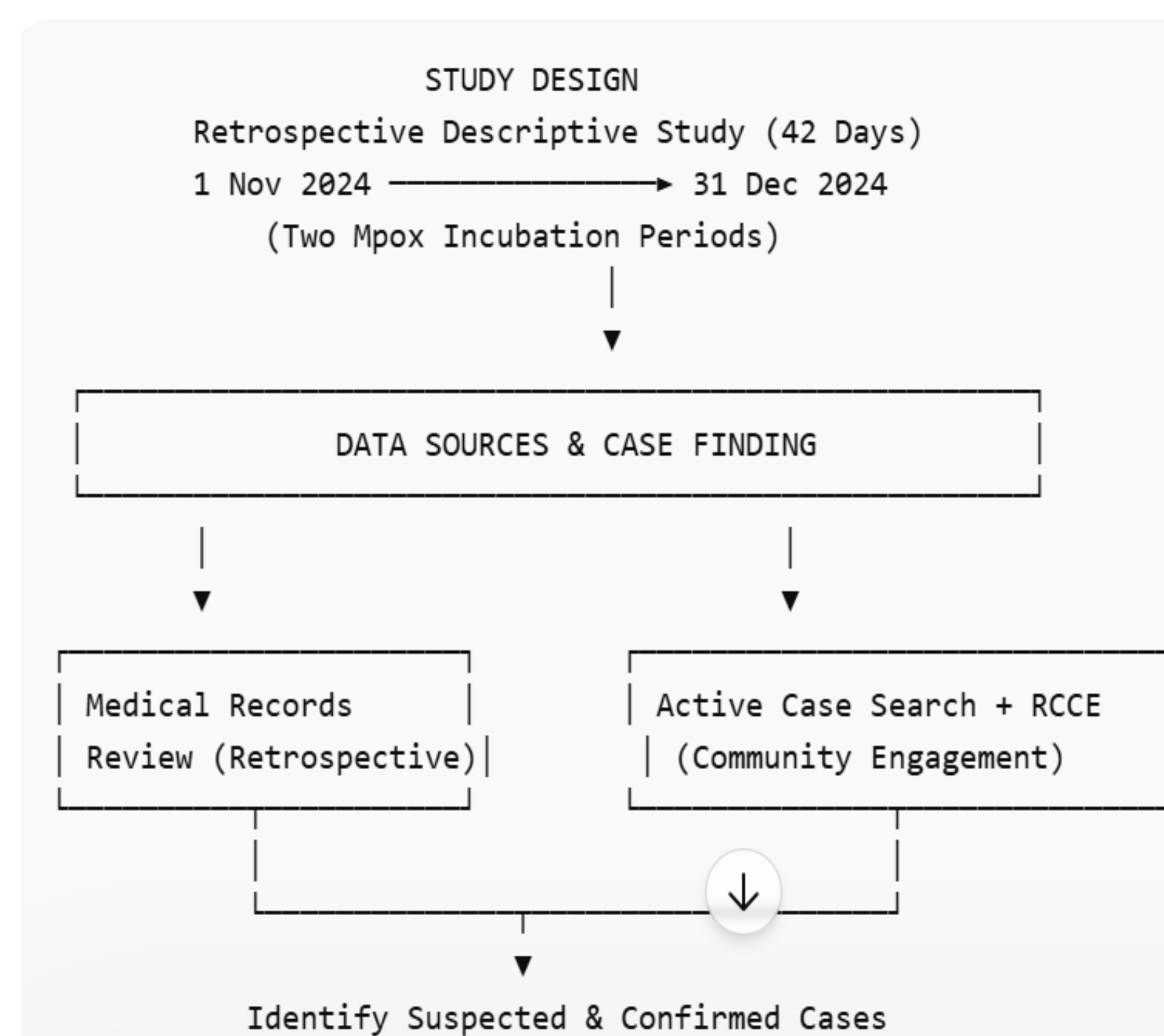
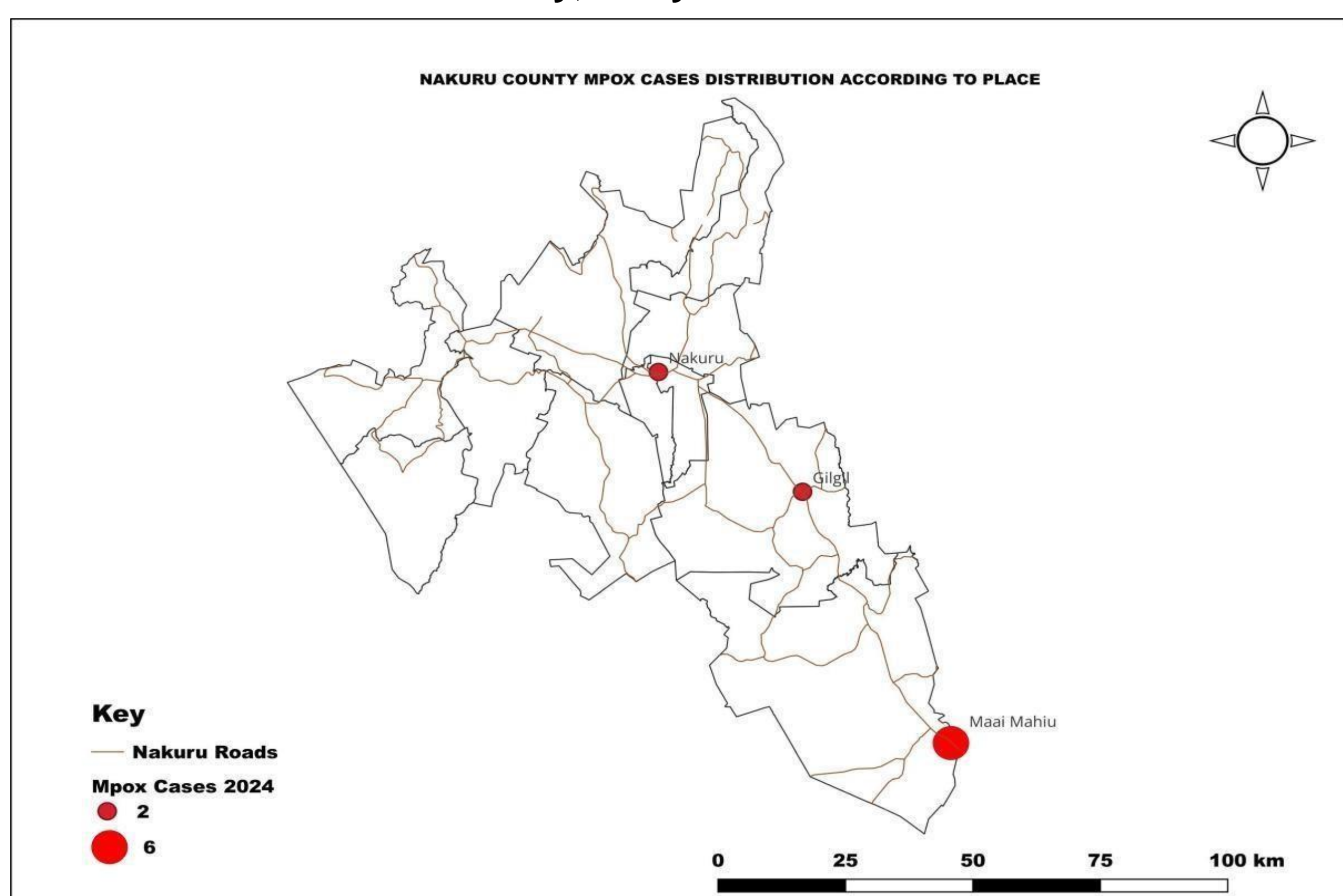
- Improve case detection through active case search, enhancing contact identification and follow-up.
- Conduct detailed case investigations.
- Institute timely public health interventions to interrupt further transmission.

METHODOLOGY:

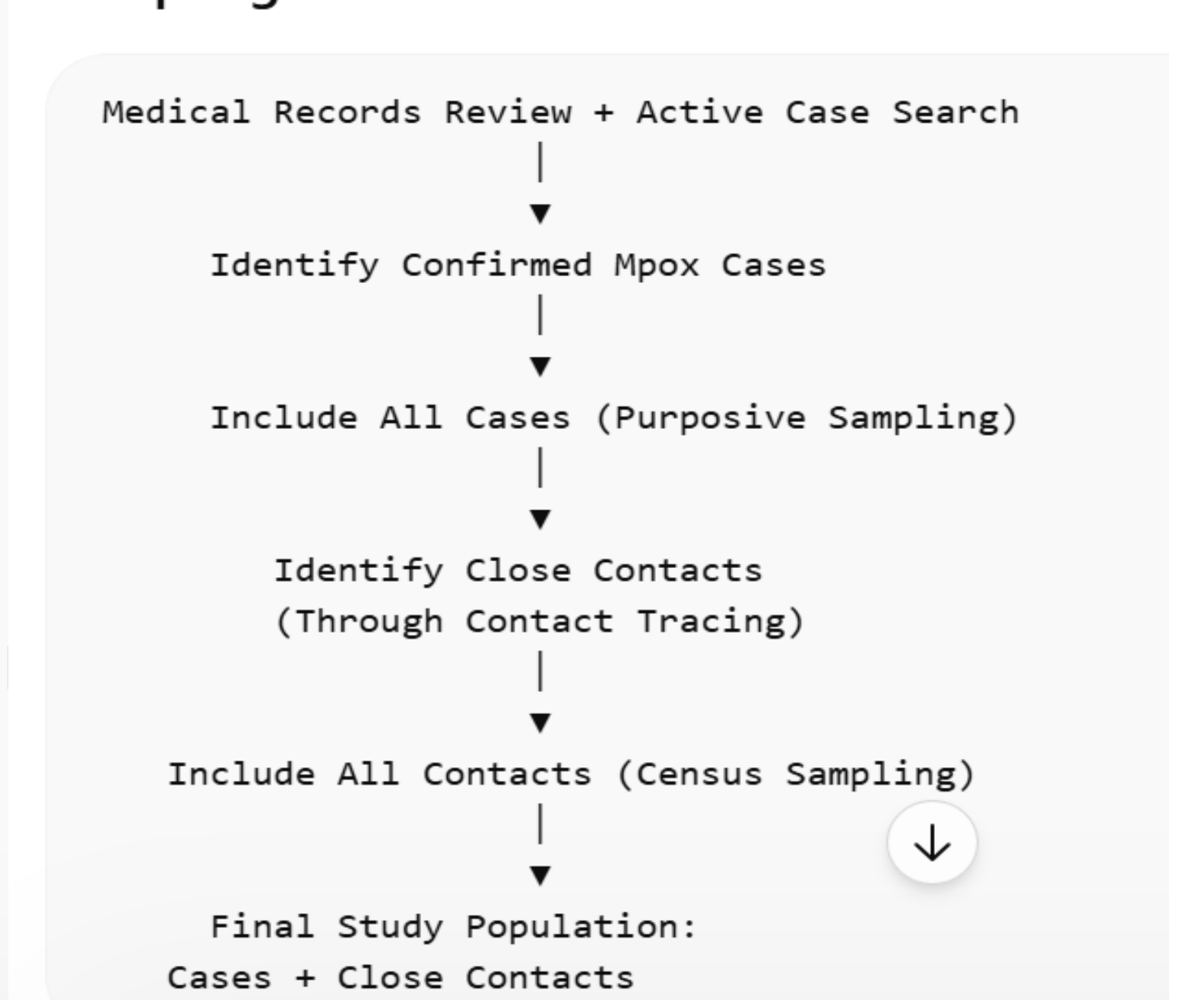
A retrospective search of medical records was conducted over two incubation periods (42 days, from 1st November 2024 to 31st December 2024) to identify and document potential Mpox cases. Structured interviews were administered to confirmed Mpox cases and their close contacts to collect comprehensive data on transmission dynamics and potential risk factors. The data obtained from these interviews were systematically recorded and updated in the ADAM tool, facilitating precise case tracking and analysis. Active case search was conducted alongside risk communication & community engagement activities.

STUDY DESIGN AND SAMPLING

STUDY AREA: Nakuru County, Kenya

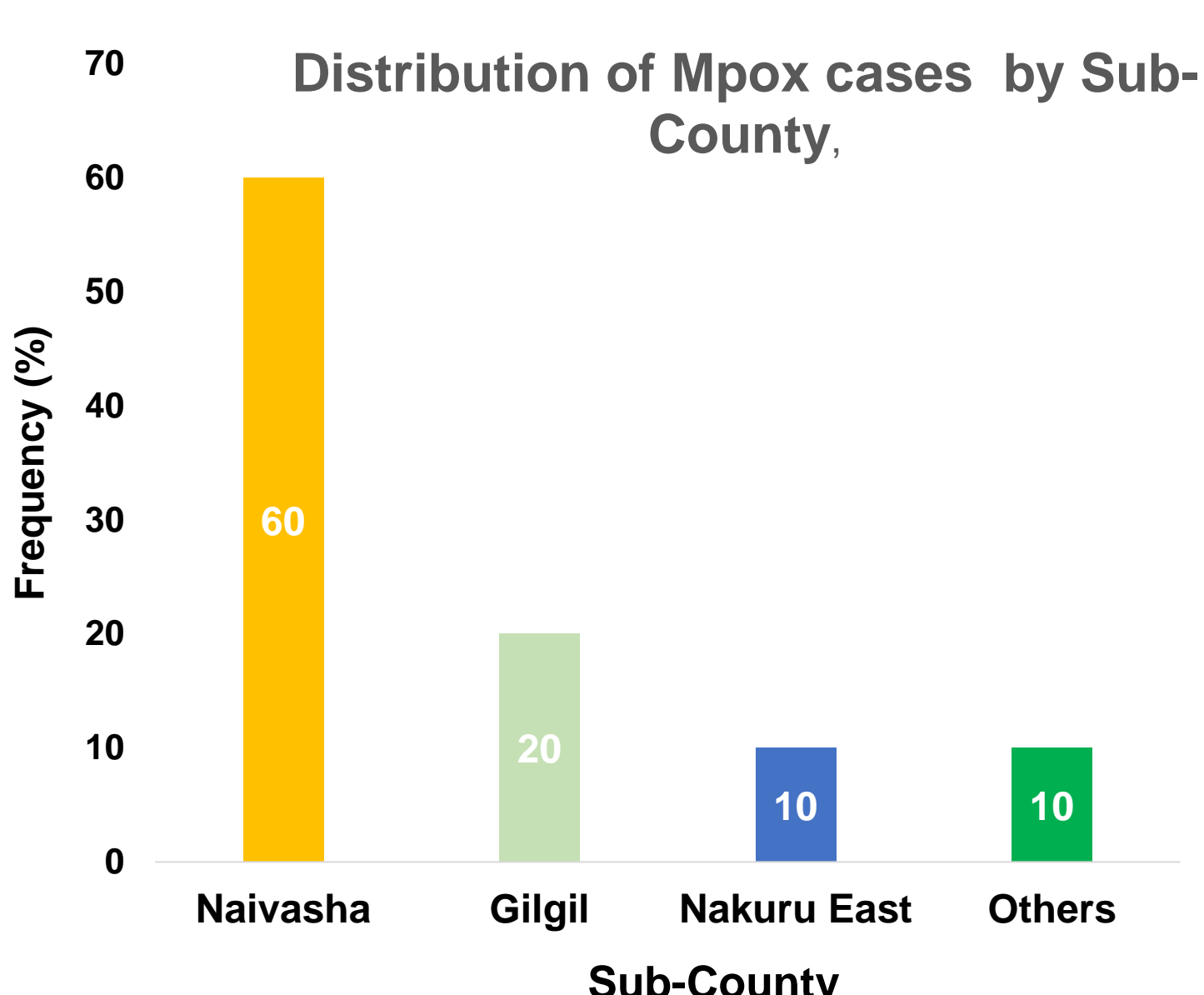
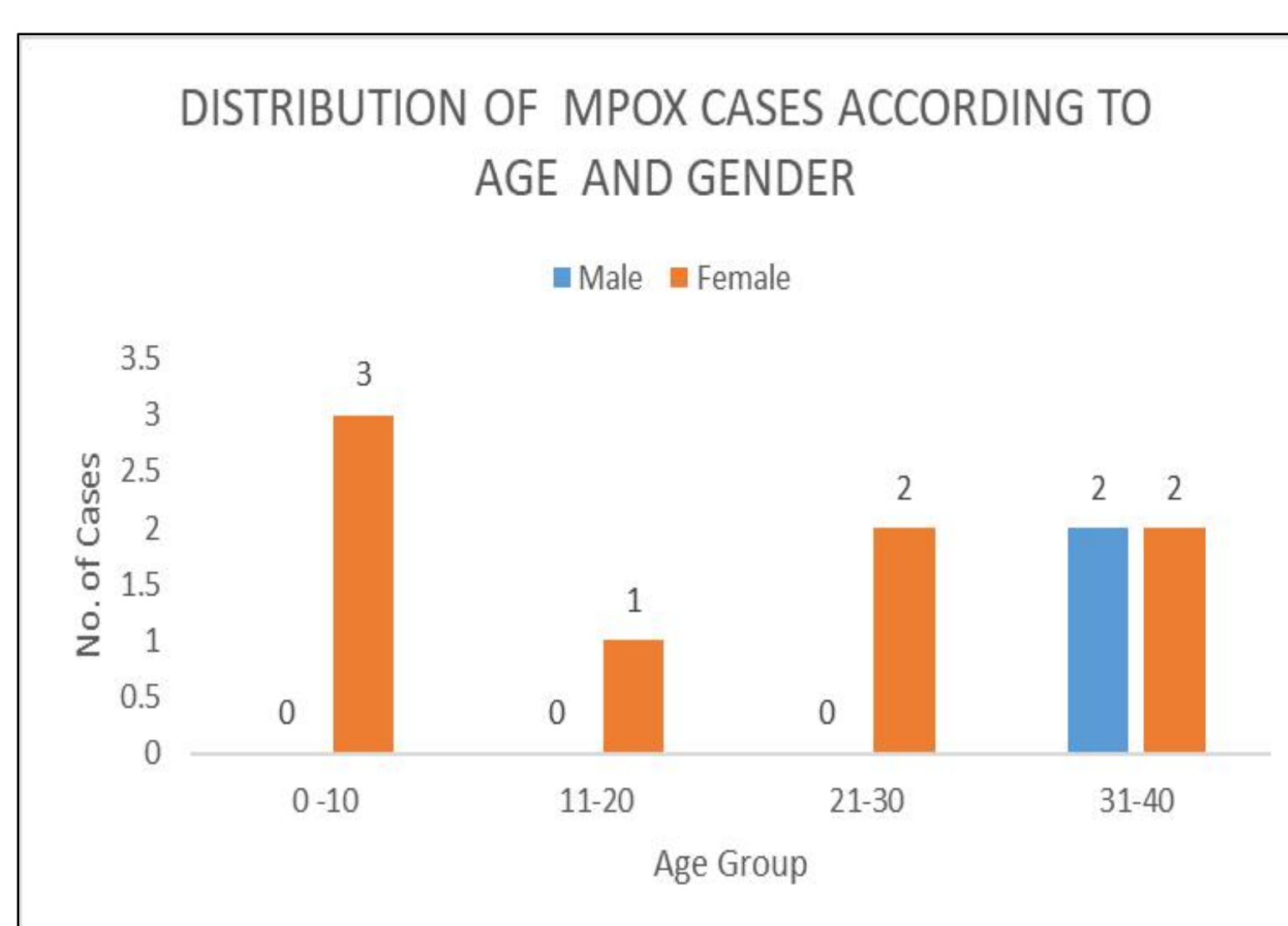
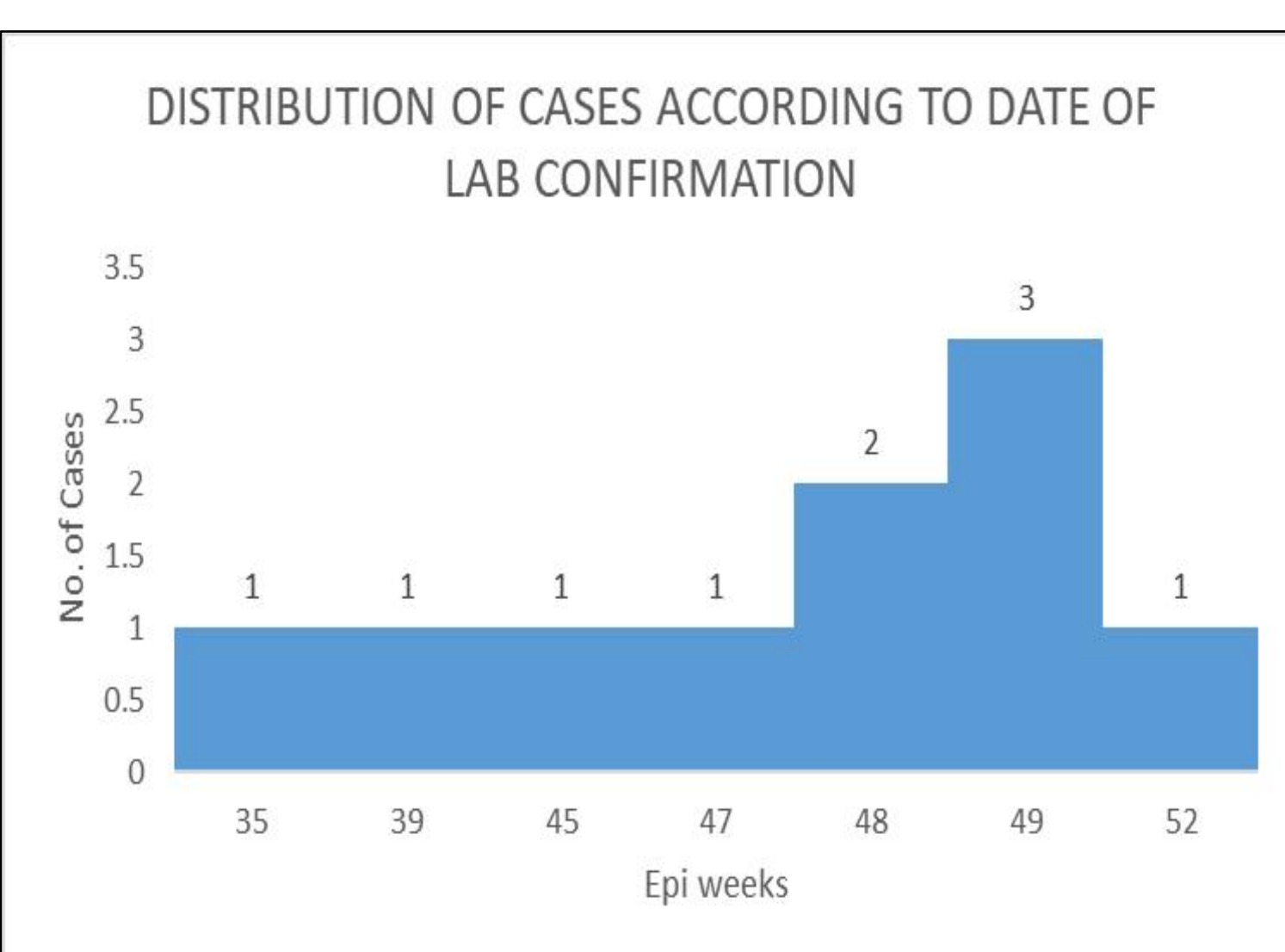


Sampling Procedure Flowchart



STATISTICAL ANALYSIS: Data were descriptively analyzed by person, place and time. Analysis was done in Microsoft Excel, with spatial mapping in QGIS, and results presented through tables, charts, graphs, and maps.

RESULTS:



Sensitization on Mpox in Nakuru County						
HCWs	Peer Educators	Female Sex Workers	Truck Drivers	Community	CHPs	MSM
354	68	143	51	397	270	4

DISCUSSION

A total of 10 cumulative confirmed Mpox cases were reported in Nakuru County by December 2024, indicating a localized outbreak that was successfully contained through surveillance and response measures. Females accounted for **80% (8/10)** of cases, while males represented **20% (2/10)**, with all male cases occurring among truck drivers, suggesting mobility-related exposure. The most affected age group was **31–40 years at 40% (4/10)**, followed by children aged **0–10 years at 30% (3/10)**, with other age groups contributing **30% (3/10)**, indicating transmission across both socially active adults and household contacts. Geographically, most cases occurred in **Naivasha Sub-County (60%, 6/10)**, followed by **Gilgil (20%, 2/10)** and other areas (**20%, 2/10**), reflecting clustering in high-density and high-mobility settings.

CONCLUSIONS

Deployment of Rapid Response Teams played a critical role in strengthening Mpox surveillance, improving case detection, and interrupting community transmission in Nakuru County. The experience demonstrates the effectiveness of rapid, coordinated, multi-sectoral response in high-mobility settings. Sustained active surveillance, targeted RCCE, engagement of private health facilities, and integration of key population programs are essential for controlling Mpox and enhancing preparedness for future outbreaks.



Contact: ogaunya2012@gmail.com