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RISK EVALUATION AND MANAGEMENT OF THE MALARIA COMMODITIES SUPPLY CHAIN IN KAJIADO COUNTY, KENYA

ABSTRACT No.74

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INTRODUCTION

Malaria is a leading cause of morbidity and mortality globally, especially in sub-Saharan Africa. In Kenya, there is an estimated 3.5 million cases and 10,700 deaths each year (WHO, 2021).

Arid and semi-arid lands (ASALs) are favorable climates for mosquito breeding and seasonal transmission of malaria. Kajiado county is part of ASAL region.

The county experiences seasonal malaria transmission and occasionally, sporadic outbreaks. These unanticipated outbreaks can lead to unprecedented consumption and depletion of malaria commodities.

Kajiado County Health Products and Technologies Unit (HPTU), in collaboration with USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) Afya Ugavi, provided both technical and logistical support to evaluate supply chain (SC) management of rapid diagnostic kits (RDTs), insecticide treated nets (ITNs), antimalarial drugs, and other critical health commodities that aid in the prevention and treatment of malaria.

Kajiado HPTU was selected for this initiative due to abnormally prolonged rainfall in January to June 2020 which favored conditions for increased mosquito breeding. This led to a significant rise in cases, total of 248 cases leading to an upsurge in the consumption of malaria commodities. In response, Kajiado County HPTU and GHSC-PSM Afya Ugavi designed a risk evaluation and management analysis of the malaria commodities supply chain with the following objectives.

1. Evaluate availability of malaria commodities and storage conditions.
2. Evaluate capacity of human resource.
3. Assess financial management strategies.
4. Assess documentation and availability of reference materials.

METHODS

A multidisciplinary team (SCHMT) visited eight of the 35 health facilities in Kajiado West sub-county from 8th to 11th June, 2021 to find out availability and use of malaria commodities. These facilities were selected due to their location in regions that had experienced malaria outbreaks in the previous year.

The data collection methods included direct field observation and data capture using an integrated support supervision and SC audit scored checklist developed by GHSC-PSM Afya Ugavi.

Ministry of Health (MoH) documents reviewed included: the lab registers, out patient registers and malaria dispensing registers. The data for total number of malaria cases tested, total number positive, number of antimalarial drugs dispensed and total number of LLINs distributed from Jan to May 2021 was captured and documented.

No identifiable patient information was collected, therefore no approvals were obtained.

Facility	June 8, 2021	June 9, 2021	June 10, 2021	June 11, 2021
Lodariak dispensary				
Kilonitio dispensary				
Esonorua dispensary				
Olkramatian dispensary				
Pakase dispensary				
Oldonyonyoikie dispensary				
Enkioreroi dispensary				
Entasopia health centre				

Table 1: Work timeline

RESULTS

The overall findings indicated that two facilities had above average (54%), while the remaining six facilities had below the average scores.

Specific parameters showed that half of facilities lacked human resource capacity.

All facilities adhered to best practices of malaria management.

The majority of facilities had inadequate malaria commodities.

Data management capacities were average.

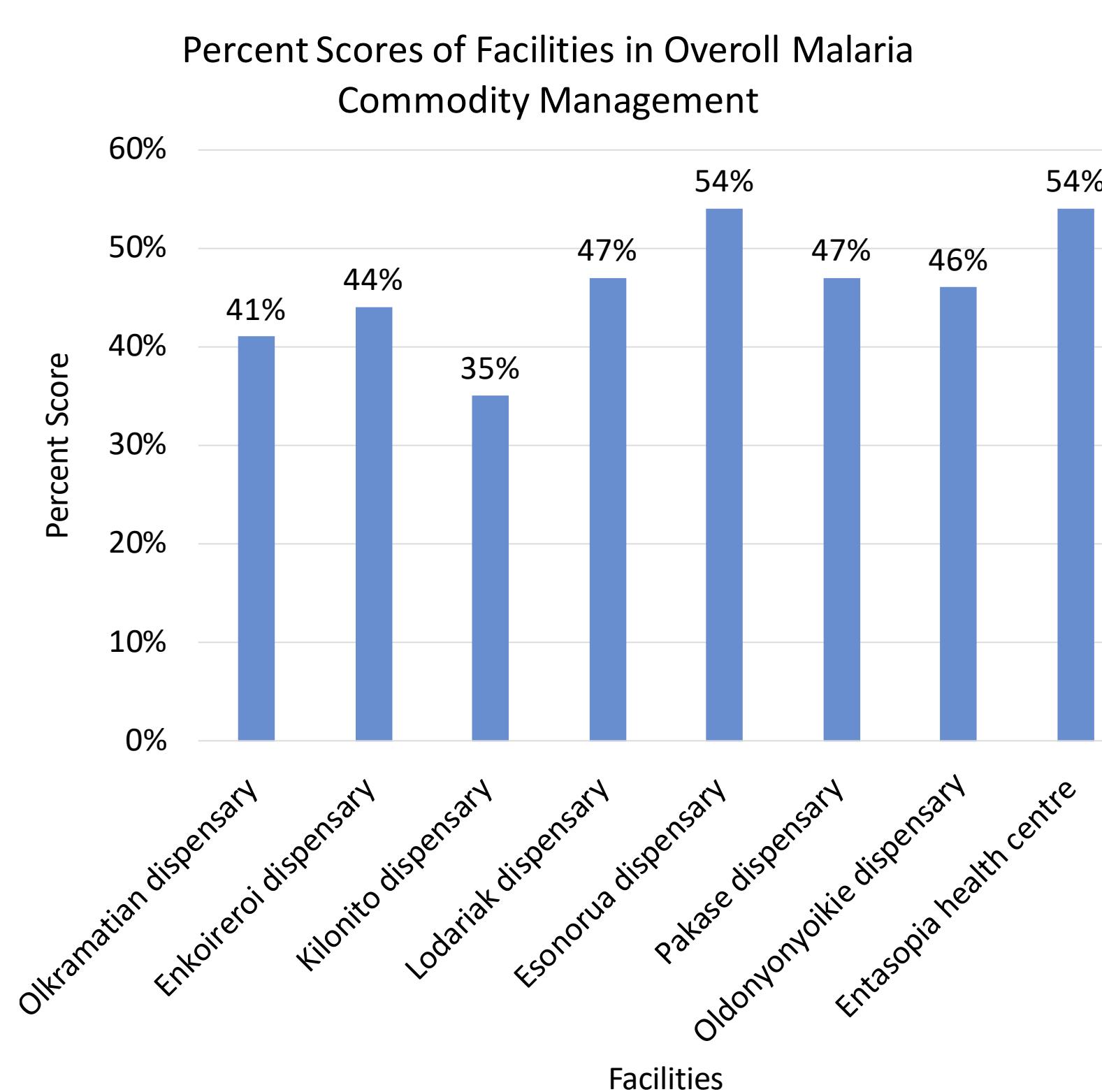


Diagram 1: Performance score of facilities

CONCLUSION

Despite the fact that HCW had appropriate training on the management of malaria, lack of adequate malaria commodities appeared to be a major factor contribution to the ineffectiveness in the control and prevention of malaria and therefore regular risk evaluation and management involved should be regular to ensure commodity security

Deployment of effective interventions aimed at managing and controlling stock outs of life saving malaria commodities by simple SMS technology and WhatsApp messenger ensures high reporting rates of reasonably accurate, real-time facility stock data that can be used to undertake corrective actions to reduce stock-outs and thereby save lives.

BIBLIOGRAPHY

1. Sophie Githinji et all, Reducing Stock-Outs of Life Saving Malaria Commodities Using Mobile Phone Text-Messaging: SMS for Life Study in Kenya, 2013
2. Oliwa, P.O., Thuo, D., & Bett, E. (2020). Malaria Outbreak Investigation Report for Kajiado West sub County, Magadi Ward between January to June. Kajiado county.
3. Thuo, D. (2021). Malaria Support Supervision Kajiado West Report. Kajiado county
4. WHO. (2021). World malaria report 2021. Retrieved from <https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021>