ABSTRACT

Objective: To conduct a supply chain assessment in Kakamega County, Kenya to identify facilitating factors and barriers to uninterrupted availability of IFA, oxytocin, drugs, misoprostol, magnesium sulphate and calcium.

Methods: Cross-sectional survey comprising both qualitative and quantitative methods.

Results: Procurement through agencies was most cost effective. There were frequent prolonged stock-outs of these commodities; no calcium supplements to give to pregnant women for the prevention of pre-eclampsia and eclampsia; no calcium policy and guidelines on the same, and calcium was not included in the essential drugs list. Only 12% of the combined IFA formulations found in the market met the recommended doses for antenatal supplementation. Low knowledge on forecasting and quantification was evident among health managers.

Conclusion: Streamlining the supply chain entails addressing policy issues, advocacy for local manufacture, strengthening forecasting and quantification capacity as well as carefully thought out procurement processes.

BACKGROUND

• Reducing maternal and newborn mortality is a major public health concern globally.

• Despite major progress, Kenya is among the countries that are not on track for meeting Millennium Development Goals 4 and 5 (Kassebaum 2014).

• Availability of high-quality pharmaceuticals is a prerequisite for reduction of maternal and newborn mortality.

OBJECTIVES

• To assess key components of the supply chain to understand the barriers and facilitating factors for selected MNCH commodities (iron and folic acid (IFA), calcium, oxytocin and misoprostol) in Kakamega County, Kenya.

• To inform formulation of innovative solutions to supply chain challenges for the selected commodities to ensure uninterrupted and sustained availability of commodities.

METHODS

• A cross-sectional, descriptive study was conducted in Kakamega central, Mumias and Matungu districts of Kakamega County, Kenya.

• Both quantitative and qualitative techniques were applied including desk reviews, semi-structured questionnaires, inventory reviews, observation, and in-depth interviews.

• In-depth interviews involved policy makers in health sector, senior Ministry of Health officials and stakeholders in maternal child health in Kenya.

• A total of 19 health facilities were randomly selected and 151 ANC and 275 under-five exit interviews were conducted.

• Quantitative data was harvested from inventories at Kenya Essential Medicines Supply Agency (KEMSA) warehouses, Division of Family Health and Health facilities over the previous 12 months.

• Data was collated and analysed using Stata software for quantitative and qualitative data, respectively.

RESULTS

• Consumption data is largely unavailable and rarely used to guide quantification.

• Central medical stores have inadequate stocks of IFA and abundant stocks of Oxytocin.

• Misoprostol was largely unavailable in health facilities because the policy does not allow its use in primary level facilities.

• About 70% of health facilities had inadequate (less than 3 months) stock of IFA.

• Most of the IFA is sourced from outside the country. There is widespread availability of the combined iron and folic acid formulation.

• Only 23% of the IFA stocks available in the market met the WHO supplementation dosing requirements.

CONCLUSIONS

In conclusion, streamlining the supply chain entails addressing policy issues, advocacy for local manufacture, strengthening forecasting and quantification capacity as well as a carefully thought out procurement process.

Main challenges to be addressed include the lack of policy and guidelines on calcium supplementation for pregnant women; low local manufacturing capacity; high prices in the private sector; low knowledge on forecasting and quantification among health managers and service providers; poor inventory management and storage facilities.

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