

## **ABSTRACT**

### **Background:**

Immunization has lowered global incidence of the vaccine-preventable diseases targeted under the global Expanded Programme on Immunization (EPI). The World Health Organization (WHO) estimates that 2.5 million children under the age of five die from vaccine-preventable diseases each year [1]. The highest rates of under-five mortality are in Sub-Saharan Africa and Southern Asia [2]. The Kenya Demographic and Health Survey (KDHS) 2008-09 showed that only 77% of children aged between 12-23 months were fully immunized according to the KEPI schedule. This coverage was below the WHO recommended national immunization coverage of 90%. The objective of this study was to determine the relationship between health system inputs and the immunization dropout status among children aged 12-23 months seeking health care services in Narok North district.

### **Methods:**

This was a cross-sectional study. Multi-stage sampling method was used to select 291 children aged 12-23 months brought to health facilities for services and whose mothers consented to participate in the study. Data were collected using pre-tested structured questionnaires, focus group discussions (FGDs) and key informant interviews (KIIs).

### **Results:**

The means of transport used to access the health facility, maternal knowledge of vaccine-preventable diseases, health education to mothers, walking distances to health facilities, number of health workers and vaccine stock-outs were the factors that were related to the dropout status of children.

### **Conclusions and Recommendations:**

Access to immunization services was still a major factor contributing to children dropping out before completion of the recommended immunization schedule. Maternal knowledge on vaccine-preventable diseases needs to be enhanced. Inadequate health education, inadequate number of health