

Effects of Mobile Health Technologies on Uptake of Routine Growth Monitoring among Caregivers of Children Aged 9 to 18 Months in Kenya

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Abstract

This study aimed at finding out the effects of mobile health (*mhealth*) technologies on uptake of Routine Growth Monitoring (RGM) among caregivers of children aged above 9 months in Kenya. This was a quasi-experimental study. The experiment groups received Short Text Message (STM) and Voice Call (VC). The analysis demonstrates that in month 1, caregivers who received STM were 6.875 times more likely to take their children for RGM compared to control (OR = 6.875; 95 CI: 3.591–13.164); caregivers who received VC were 6.750 times more likely to take their children for RGM compared to those in control arm (OR = 6.750; 95 CI: 3.522–12.938). Policy makers and implementers in the health will find these study findings useful in deciding whether or not to adopt STM or VC in improving uptake of RGM for children above 9 months.

Keywords

children, routine growth monitoring, *mhealth* technologies, caregivers, access to care

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Introduction

Growth monitoring is defined as the regular weighing and measuring of a child's length or height and head circumference especially for children aged below 2 years and graphing the measurements taken on a growth chart.¹ One of the Sustainable Development Goals targets at reducing under-five mortality from 39 per 1000 live births to at least as low as 25 per 1000 live births.² There are a number of services offered in Maternal Neonatal and Child Health (MNCH) Clinics in health facilities including; routine growth monitoring, issuance of supplements for Vitamin A after every 6 months of a child's growth, vaccination, health education and counselling, treatment for minor ailments, nutritional and medical conditions screening for management, and tracing and following up of those who have defaulted clinic attendance.³ It is important to routinely monitor the growth of children below 2 years using all the 3 WHO recommended measurements including Weight-for-Age, Length-for-Age, and Weight-for-Length as well as Head Circumference since they enable identification of problems such as underlying chronic diseases, feeding practices, and recent and sudden illnesses.⁴ Growth failure among children aged 0 to 24 months

has critical lifetime consequences.⁵ Caregivers' failure to attend routine growth monitoring more especially for children aged more than 9 months has greater lifetime consequences. It may lead to malnutrition, increased spread of infectious diseases and high mortality rates.^{4,6} Caregivers stop attending child health clinics after their children receive the WHO recommended measles vaccine at the age of 9 months. This means that beyond the ninth month children will miss RGM. Children under the age of 5 years should receive vitamin A supplementation at 6, 12, 18, 24, 30, 36, 42, 48, 54, and 60 months thus if children are not taken to clinics after 9 months for routine growth monitoring then they will miss these important supplements. Deworming of children under 5 years normally begins at 24 months therefore continuation of routine growth monitoring beyond 9 months ensures children are dewormed in time.⁴ Mobile

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