



SMS reminders and vocal messages increase adherence to immunization and 6-month vitamin A supplementation

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Introduction

Routine delivery of vitamin A supplementation (VAS) alongside immunization represents a sustainable delivery model for children under 12 months, but suffers from low coverage rates and high drop out from one contact point to the next. Using mobile phones to ensure that caregivers are aware of the date of the next appointment for their child may reduce drop out and increase coverage.

Objectives

To evaluate the effects of automatic appointment reminders sent to caregivers by mobile telephone on the attendance of immunization contact points among children aged 0 to 11 months old in the health district of Korhogo, Cote d'Ivoire



Methods

This was a randomized controlled study targeting the caregivers of children aged 0 to 11 months old living in the catchment area of 29 health centers from the health district of Korhogo, in the north of Cote d'Ivoire.

Caregivers were recruited during their child's BCG vaccination if they owned a mobile phone and consented to study participation.

After recruitment, caregivers (n=1,596) were randomly assigned to two groups: (a) SMS reminder group (by telephone via SMS or voice message in local language), and (b) control group.

Caregivers received a reminder message two days before the vaccination appointment day of the child for each of the 5 following contact points in the vaccination calendar (Penta 1 at 6 weeks, Penta 2 at 10 weeks, Penta 3 at 14 weeks, Vitamin A supplementation at 6 months and measles at 9 months). The study was conducted between June 2013 and February 2015.

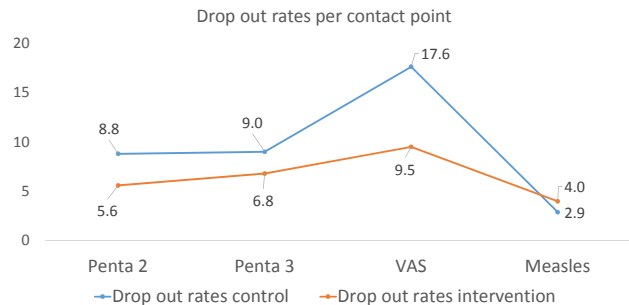
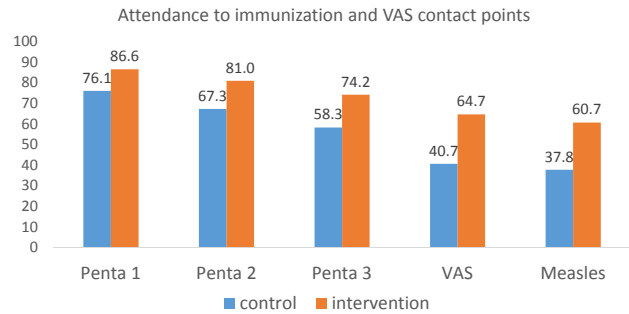
Key Results

Vaccination coverage for Penta 1, 2 and 3 was 10.5%-15.9% higher for the SMS reminder group compared with controls corresponding to ~3 times higher relative odds of vaccination.

For the receipt of vitamin A supplementation (VAS) at six-months of age, coverage levels were 24% higher in the SMS reminder group corresponding to a 5.7 increased odds of VAS receipt relative to the control group.

Finally, for measles immunization, the SMS reminder group reached a coverage of 60.7% vs. 37.8% for controls, representing a 22.9% higher coverage.

Overall dropout rates were 30.0% in SMS reminder group and 50.2% in the control group (p<0.05).



Conclusions

Caregivers receiving mobile phone reminders in the form of SMS or oral messages were 2-5 more times likely to attend immunization and vitamin A supplementation contact points than those who did not receive them.

These results suggest that the use of mobile phone reminders are an effective way to increase demand for immunization and VAS services, as well as to monitor coverage and dropout rates.

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