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The role of community distributors in ensuring the quality delivery of seasonal malaria chemoprevention in Nigeria

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Directly observed treatment practised by community distributors is critical for the quality delivery of seasonal malaria chemoprevention.

Introduction

In Nigeria, community distributors play a crucial role in delivering seasonal malaria chemoprevention (SMC), which consists of administering a three-day course of sulfadoxine-pyrimethamine and amodiaquine (SPAQ) to children 3–59 months during the high transmission season. [1] Effective SMC delivery relies on ensuring children receive the full course of medicines over three days. To achieve this, community distributors engage in directly observed treatment (DOT), assist caregivers with subsequent doses, encourage caregivers to record the provision of medicines using an SMC reporting card and provide guidance on handling adverse reactions. This study investigates these and other factors that support the completion of SMC courses.

Methods

- A cross-sectional household survey was conducted after the last SMC cycle in October 2022.
- A total of 11,188 primary caregivers were selected from nine SMC implementing states, using multistage random sampling to obtain a representative sample of the target population at the state level.
- We fitted mixed-effects multivariable logistic regression models to explore the association between the receipt of a full course of SPAQ and factors, including community distributors' practise of DOT, caregivers' retention of the SMC card and caregivers' knowledge of how to respond to an adverse reaction.

Results

- Children who received SPAQ as DOT were almost three times more likely to receive a full course of SPAQ (adjusted odds ratio (AOR): 2.75, 95 percent confidence interval [95% CI]: 1.69–4.47, p=<0.001).
- The odds of receiving a complete course were almost three times higher when caregivers retained the SMC record card (AOR: 2.92, 95% CI: 0.54–2.39, p=<0.001).
- Caregiver knowledge of how to react to an adverse event or reaction was not significantly associated with receipt of a full course of SPAQ (AOR = 0.950, 95% CI= 0.53–1.69, p=0.86).

Conclusion

The study reveals an association between caregivers administering a full course of SPAQ and receiving the medicines as DOT from community distributors, as well as caregivers retaining SMC cards. We found no significant association with caregiver knowledge of how to react if the child experiences an adverse reaction. This suggests the need to strengthen community distributors training and supervision in these aspects of their role. These insights have substantial implications for optimising the role of community distributors in delivering high-quality SMC in Nigeria.

Results

Figure 1: Key variables assessed

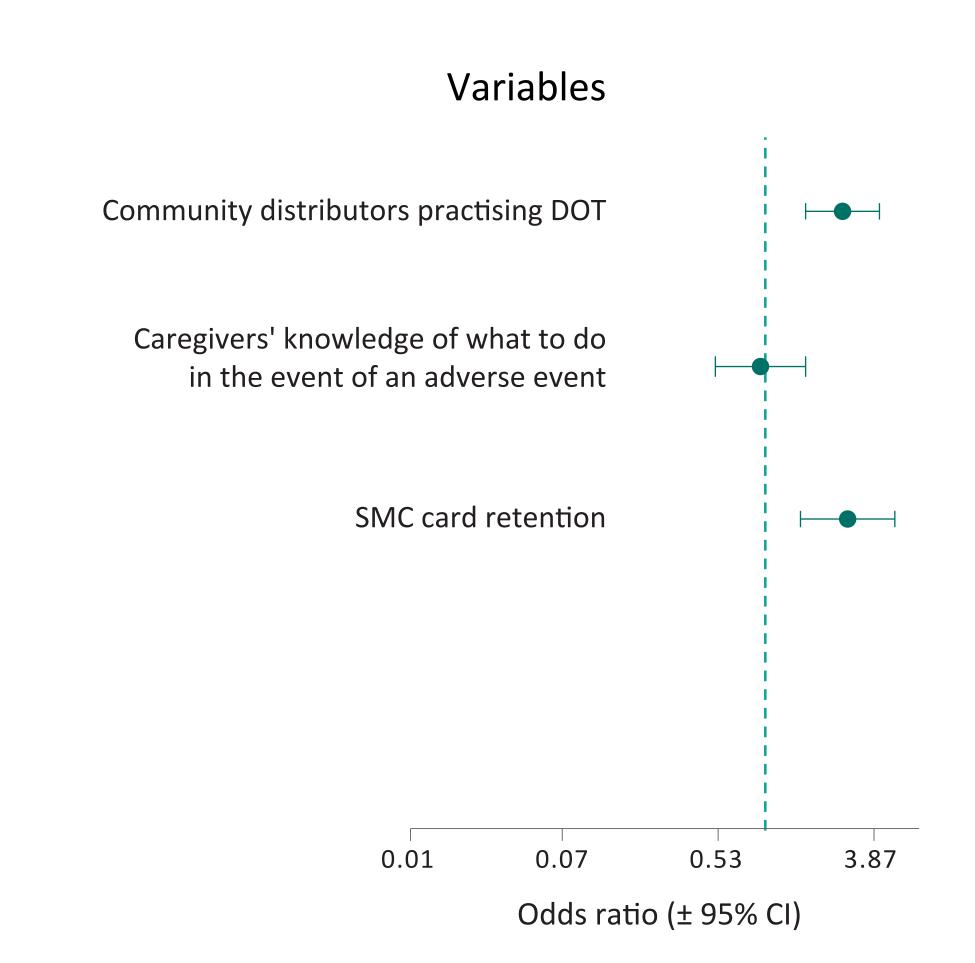
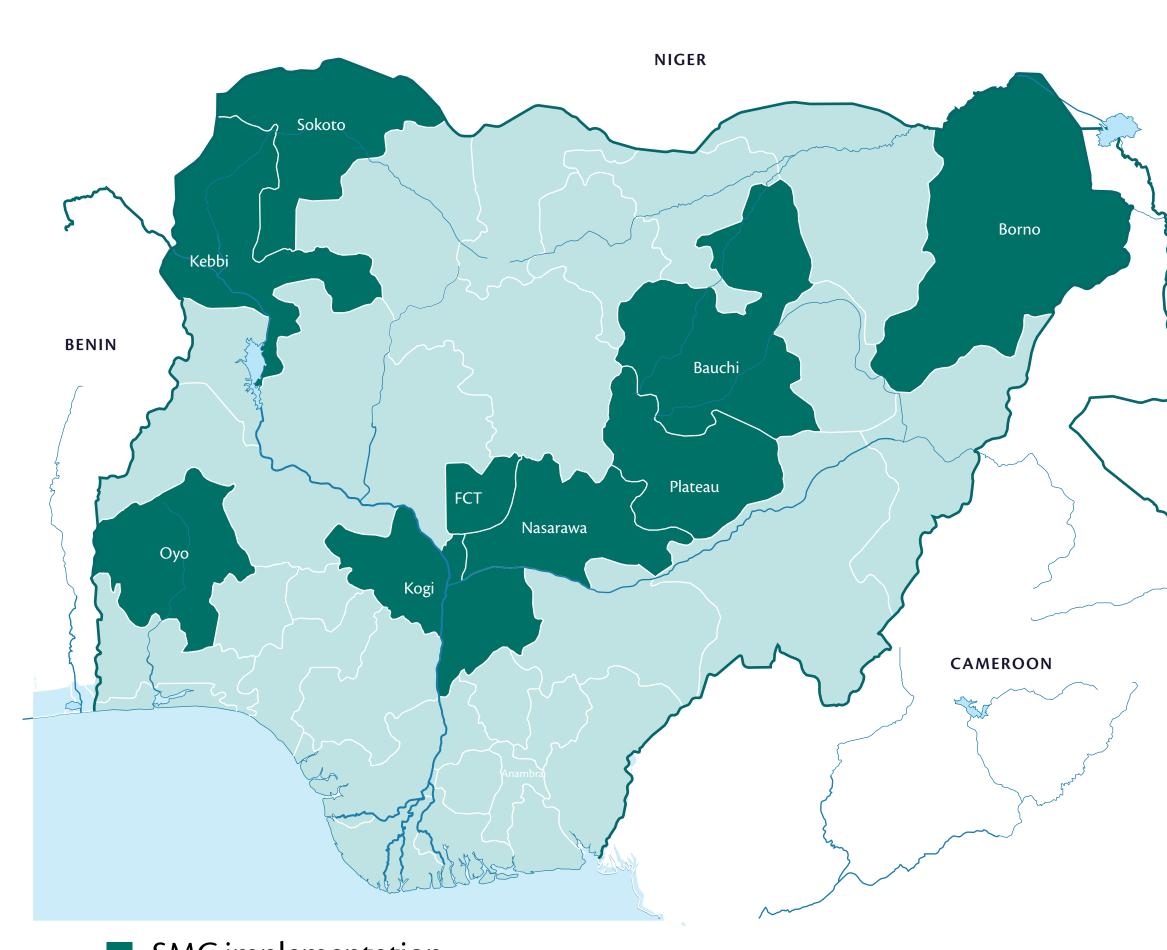


Figure 2: Map of the nine SMC implementation states in Nigeria



SMC implementation



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Reference

1. World Health Organization. Guidelines for malaria. World Health Organization, 2022.