

SUSTAINING GAINS OF ARTEMISININ-BASED COMBINATION THERAPY UTILISATION IN MALARIA TREATMENT

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Background

- Increased utilisation of artemisinin-based combination therapy (ACT) has contributed significantly to the global reduction of malaria related morbidity and mortality^{1,2}. Malaria related mortality in African declined from 764,000 in year 2000 to 395,000 in 2015².
- In Nigeria, although the use of ACTs for malaria treatment in children under five years increased from 2% in 2008 to 18% in 2013, use is below the national target of at least 80% by 2010³. The distribution of Non-ACTs such as Chloroquine (CQ) may contribute to the reduced utilisation of ACTs and trigger the development and spread of antimalarial drug resistance⁴.
- There is a need to ascertain the determinants of ACT utilisation and source of antimalarials for treatment in Nigeria. This is important to generate evidence to monitor ACT utilisation and sustain the current progress made in the decline in malaria cases.

Methodology

- A cross-sectional analysis of 2013 Nigeria Demographic Health Survey (DHS) was conducted to examine variables of interest using STATA 14.
- Target population: children under 5 who has fever two weeks before the survey and took an antimalarial.
- Effect of independent variables on the outcome variable: use of ACTs and non-ACTs for malaria treatment in children was explored. Source of antimalarials and advice for treatment for child which could influence utilisation of antimalarials was also explored.
- Variables were described using univariate and bivariate analysis described while multivariate analysis
- Determinants of antimalarial utilisation were identified at multivariate analysis.

Acknowledgement

- ICF Macro International,
- Society for Family Health, Nigeria
- University of Edinburgh, UK

Results

- Most mothers used CQ (28%) and SPs (26%) for treatment of their children while only 18% used ACTs.
- Overall more mothers (49%) sought care for the child in private sector, 40% sought care in public sector while 9.9% administered antimalarials without seeking advice for treatment.
- In public sector, more women in the rural areas treated their children's fever with non-ACT (64%) than ACTs (51%).
- More mothers (42.7%) that visited public sector facility and used ACT had no education while 49% of mothers that visited a private facility and used ACT had secondary education
- Children with mothers in poorest and poorer wealth quintile are less likely to use ACTs than non-ACTs (P=0.017)
- Women in the rural areas are less likely to use ACTs (P=0.044).

Fig 1: Antimalarial medicine used for treatment of children under 5 years old (N=1,215)

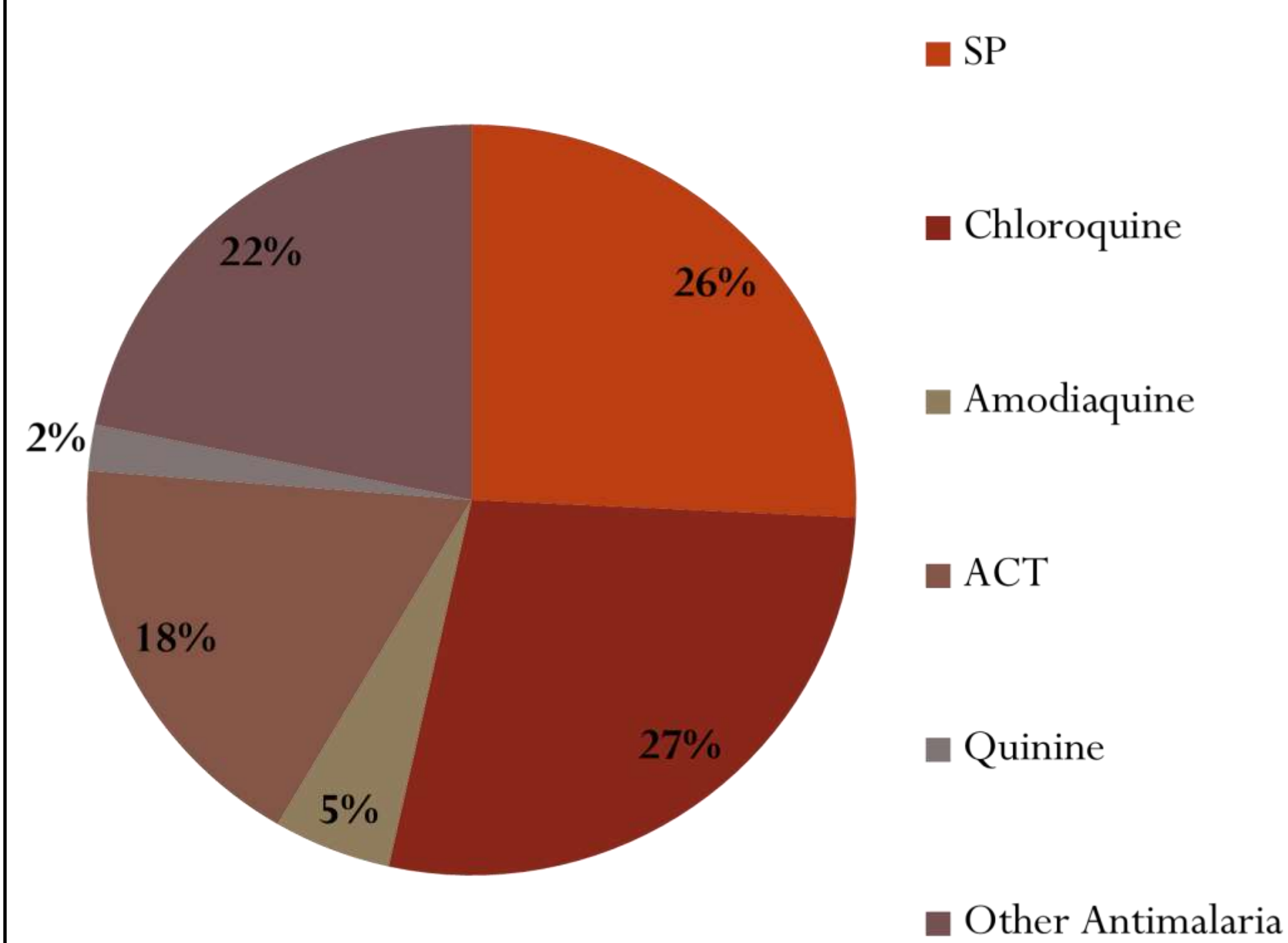


Fig 2: Distribution of antimalarial use and the first place mothers sought advice for treatment.

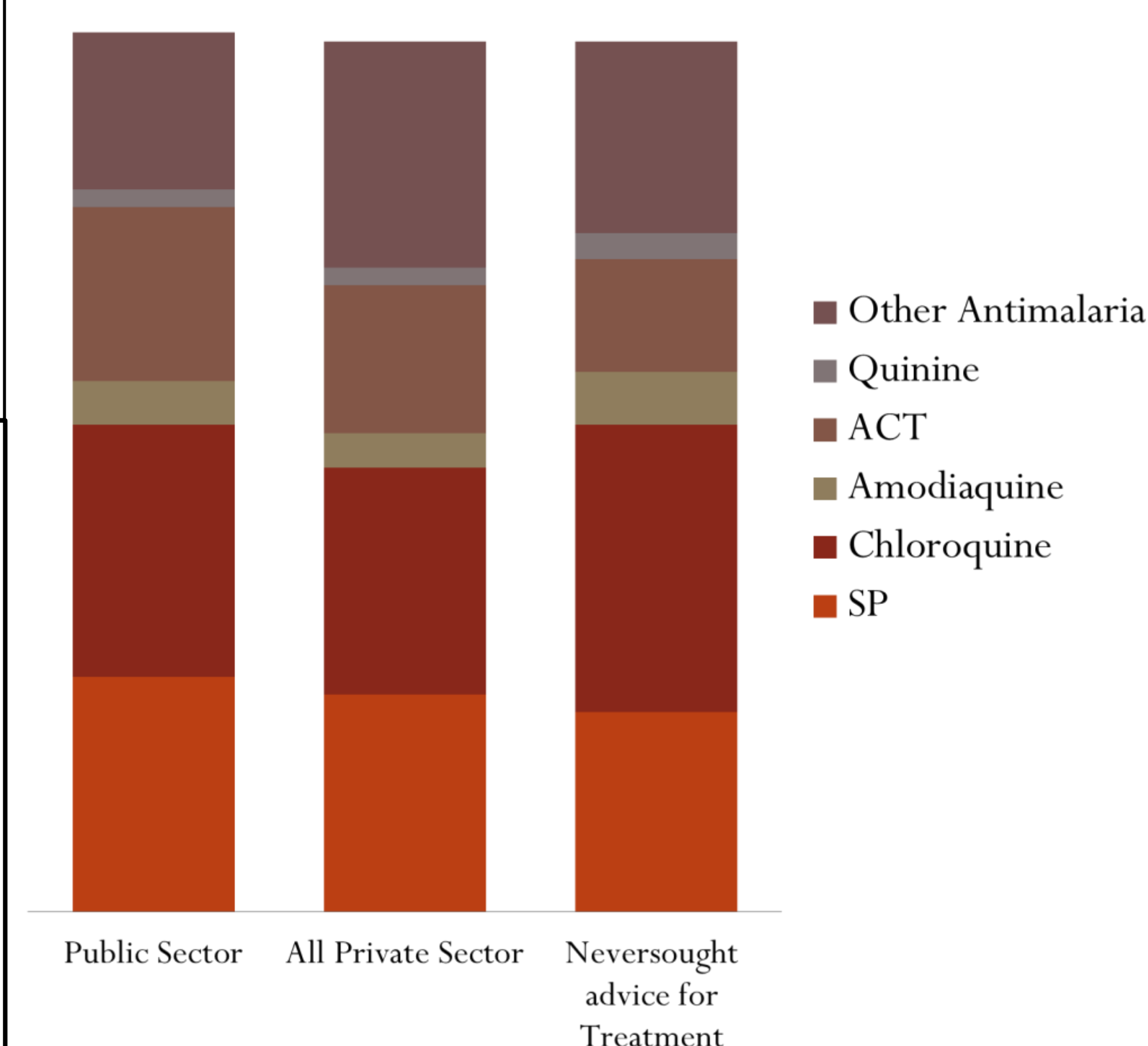


Fig 3: The first place mothers sought advice for treatment for the febrile children less than 5 years

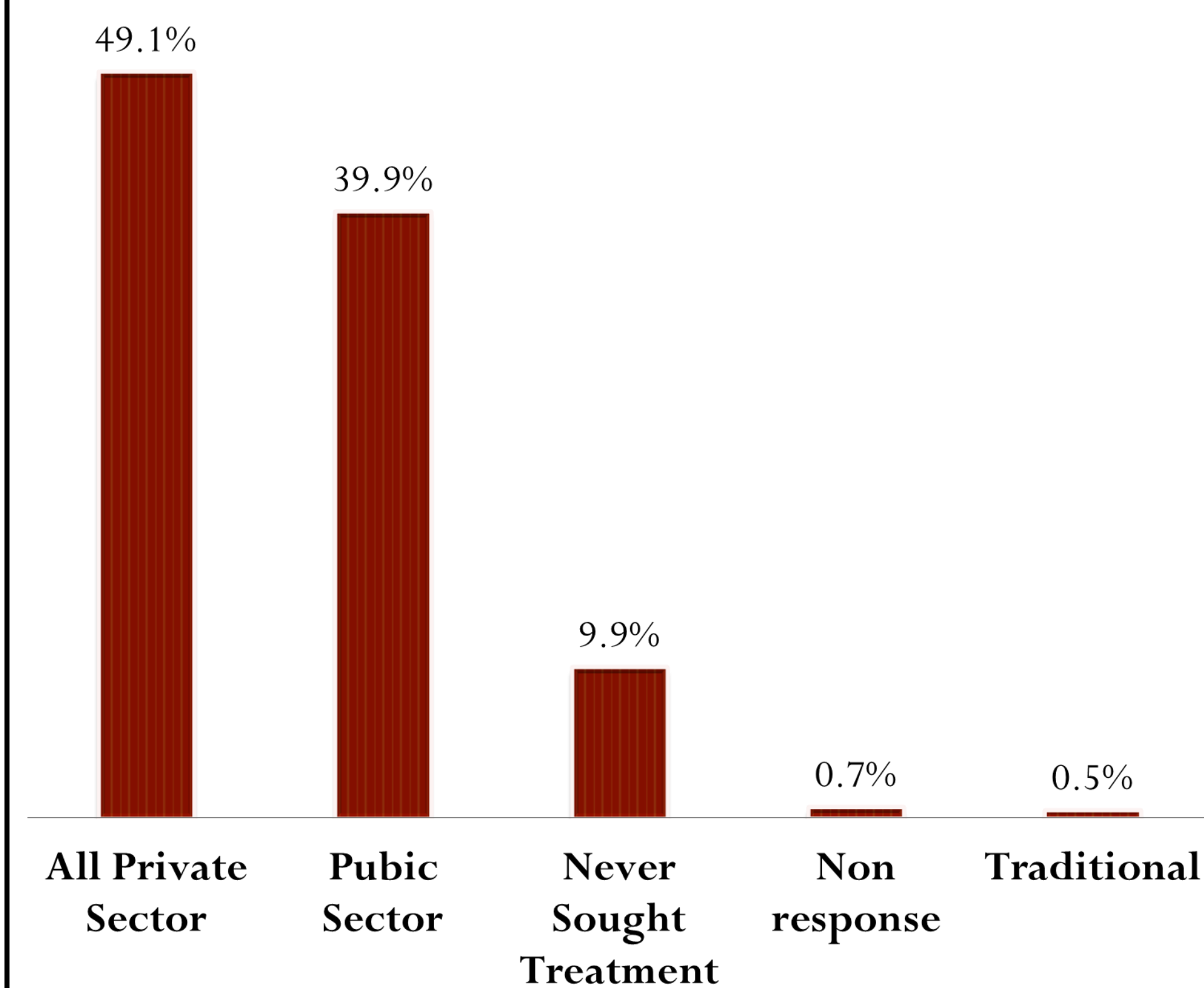
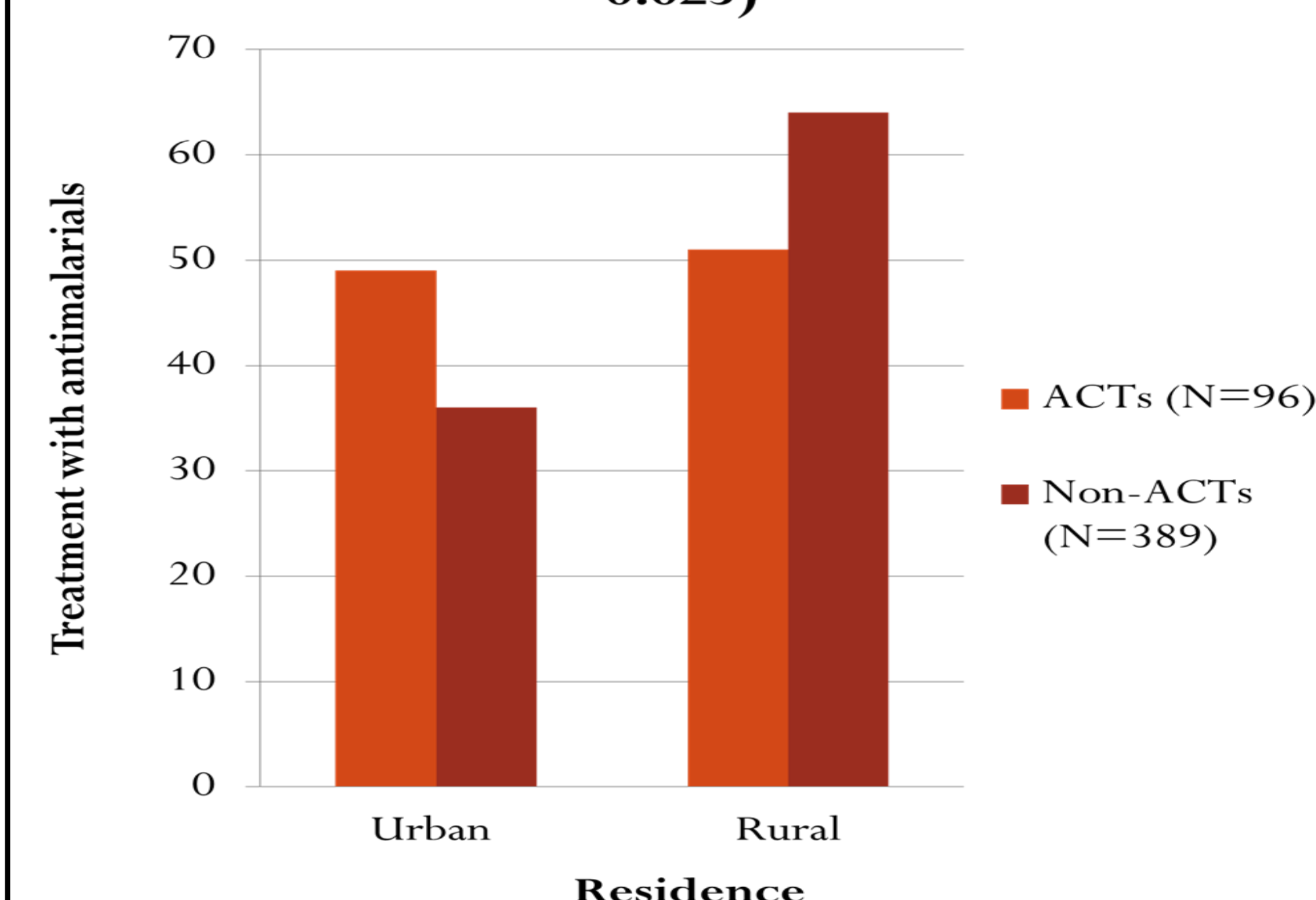


Fig 4: Treatment of child with fever in the private sector by residence (P=0.023)



Conclusions

- Use of ACTs in Nigeria remains low. Residing in rural area, type of health facility and socio economic status influence ACT utilisation
- Ensuring increased use of ACTs in both public and private sector more especially in the rural areas would sustain the gains in utilisation of ACTs.
- Phasing out non-ACTs is recommended to increase utilisation of ACTs and sustain decline in malaria-related cases.

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