The Impact of Private Sector Involvement on Malaria Control Interventions in Nigeria: Results from a Baseline Outlet Survey

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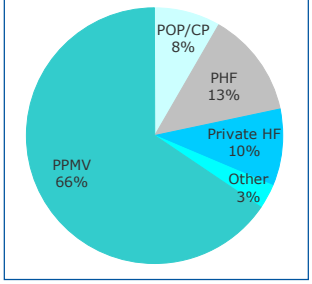
BACKGROUND

Nigeria revised the national first-line malaria treatment policy in 2005, advocating Artemisinin based Combination Therapies (ACTs) because of widespread resistance to chloroquine. In 2007, the Nigerian drug regulatory body stopped the registration of artemisinin monotherapies to safeguard the efficacy of ACTs.

To monitor levels and trends in the availability, price, and volumes of antimalarials, Society for Family Health, in partnership with Population Services International (PSI), conducted a baseline outlet survey in 2008. The following are the study results and implications for malaria programming in Nigeria.

Figure 1: Outlet Types



METHODS

- A census of outlets that could sell or provide antimalarials to a consumer was conducted in 76 sub-districts within pre-selected geographical sample areas across Nigeria.
- The census included Public Health Facilities (PHF), Part One Pharmacies or Community Pharmacies (POP/CP), Proprietary Patent Medicine Vendors (PPMVs, also know as drug stores), Private Health Facilities & other outlet types.
- Data were collected by trained interviewers using a validated questionnaire to obtain information on all antimalarials in the outlet, as well as information on provider knowledge and perceptions.

RESULTS

- A total of 607 outlets were sampled, but 23% either refused interview, were closed, or were not available at time of data collection. Thus, 468 outlets are included in the analysis (Fig 1).

Availability:

- 95% of outlets had at least one antimalarial in stock. 16.7% stocked the recommended first line ACT treatment. In public health facilities, only three full course adult first line treatments were found.
- Availability varied by outlet type: 73.7% of part one pharmacies vs. 7.5% of PPMVs stocked the first line ACT. Non-artemisinin monotherapy was available at rates upwards of 96% at both of these outlet types.

Price:

- ACTs were found to be 7 to 31 times more expensive than sulfadoxine pyrimethamine [SP], the most popular antimalarial in Nigeria. The median price of ACTs containing artemisinin lumefatrine (AL) was up to 3 times higher than the international reference price, ($2.12) (Fig 2).

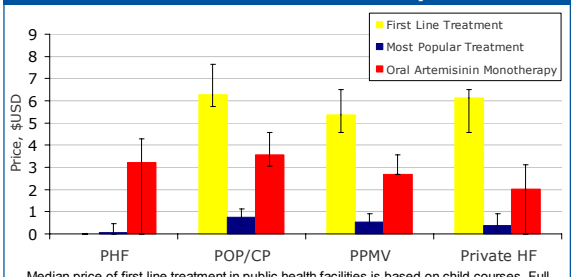
Volumes:

- The most frequently sold or distributed class of antimalarials was non-artemisinin therapies (88.3%), and the majority of these were distributed by private drug stores. More than half of the drugs sold or distributed were SP (54.5%). The first-line treatment only accounted for 2.1% of all distributed drugs (Fig 3).

Diagnostics:

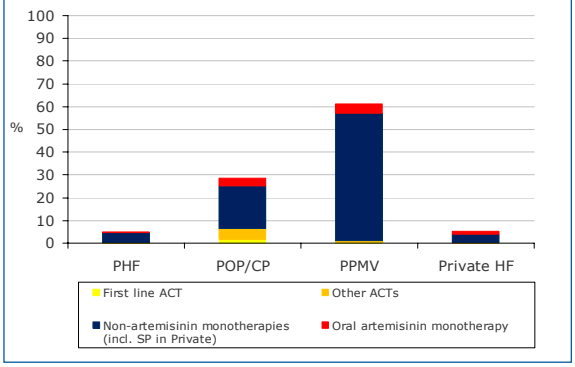
- Diagnostic blood testing was most commonly available at public health facilities: 42.6% microscopic blood testing and 26.2% rapid diagnostic testing kits were available.

Figure 2: Median Price of Full Course Adult Antimalarial Treatments by Outlet



Median price of first-line treatment in public health facilities is based on child courses. Full adult courses were found in three instances, of which pricing data was only available for two of the antimalarials ($0.00 and $4.36).

Figure 3: Relative Volumes of Antimalarials Distributed by Outlet and Drug Type



CONCLUSIONS

- Results confirm the prominence of PPMVs in the private sector versus other outlet types in Nigeria.
- The most frequently sold or distributed class of antimalarials was found to be non-Artemisinin therapies across all outlet types.
- Given the importance of PPMVs in the treatment of malaria in Nigeria, there is a need to increase efforts to encourage this outlet type to stock approved ACTs, and make the pricing more competitive than ineffective non-artemisinin monotherapies.

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