

The difference between effectiveness and efficacy of antimalarial drugs in Kenya

Amin, AA; Hughes, DA; Marsh, V; Abuya, TO; Kokwaro, G; Winstanley, PA; Ochola, SA; Snow, RW

<http://hinari-gw.who.int/whalecomwww.ncbi.nlm.nih.gov/whalecom0/pubmed/15361109>

<http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/31044>

Date: 2004

Abstract:

Objective:To demonstrate the difference between effectiveness and efficacy of antimalarial (AM) drugs in Kenya. **Methods:**We undertook a series of linked surveys in four districts of Kenya between 2001 and 2002 on (i) community usage of nationally recommended first- and second-line AM drugs; (ii) commonly stocked AM products in the retail and wholesale sectors; and (iii) quality of the most commonly available first- and second-line AM products. These were combined with estimates of adherence and clinical efficacy to derive overall drug effectiveness. **Results:** The overall modelled effectiveness for sulphadoxine-pyrimethamine (SP) was estimated to be 62% compared with 85% for reported SP clinical efficacy. For amodiaquine the modelled effectiveness was 48% compared with 99% reported efficacy during the same time period. **Conclusion:** The quality of AM products and patient adherence to dosage regimens are important determinants of drug effectiveness, and should be measured alongside clinical efficacy. Post-registration measures to regulate drug quality and improve patient adherence would contribute significantly to AM drug performance