

ROLES OF ANTIBIOTICS IN FEVER MANAGEMENT IN CHIKWAWA, MALAWI

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Background

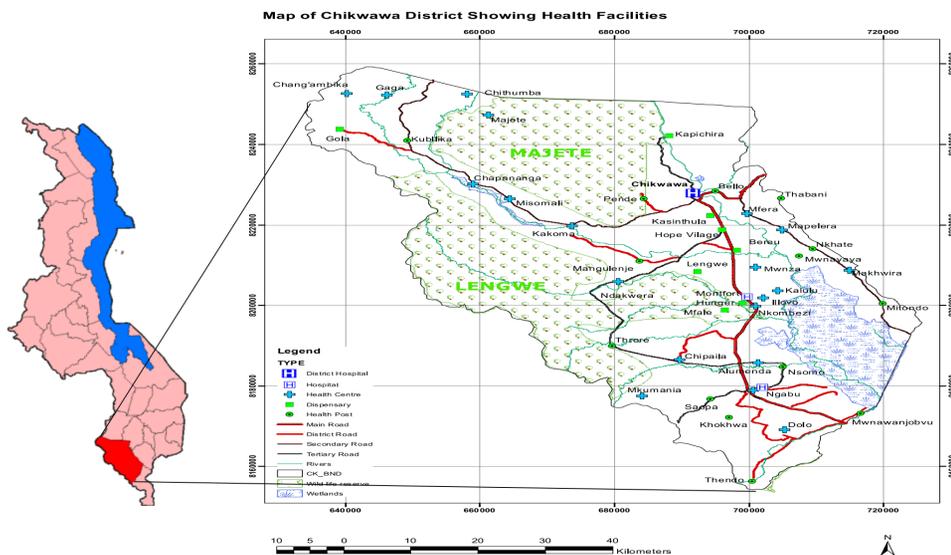
- In efforts to improve rational drug use and quality of fever case management, Malawi introduced malaria rapid diagnostic tests (MRDT) as part of the Integrated Management of Childhood Illnesses (IMCI) in 2011.
- While usage of MRDTs have led to a reduction of anti-malarials prescription, it appears that antibiotic prescription has increased sparking concerns over 'irrational' use of antibiotics which leads to drug resistance¹⁻³
- Public healthcare facilities in Low and Medium Income Countries (LMICs) like Malawi experience persistent stock-outs of essential drugs and limited qualified healthcare workers⁴⁻⁶
- We are all aware that antibiotics are being used in the communities for many things, both in animals and humans. But we don't have a deeper understanding on how they are being used generally and in fever management.
- Therefore, it is not clear whether 'irrational use' of antibiotics in LMIC is a question of access or excess or both⁷.

Theoretical Approaches

- This paper seeks to move beyond the notion that antimicrobials are being 'irrationally used' by shedding light upon the social efficacy of medicines⁸
- In order to theorise the role of antibiotics in fever management will draw upon the following theories:
 - Symbolism of medicine and biomedical care; What are other roles of medicines in people's lives besides their therapeutic properties*
 - Gender and intersectionality; How antibiotics play a role in the lives and relations of both men and women*

Chikwawa: Study Site

- Malawi is ranked 170 out of 188 on UN Human Development Index
- More than 70% Malawians live along the poverty line
- Chikwawa; 4,755 km² and has a population of 356,682
- Farming is the main source of income [cotton and livestock]
- Ilovo Nchalo Sugar estate employs 9,363 employees⁹
- Chikwawa lies in a malaria hot spots in Malawi (37% vs 39%)¹⁰



Objectives

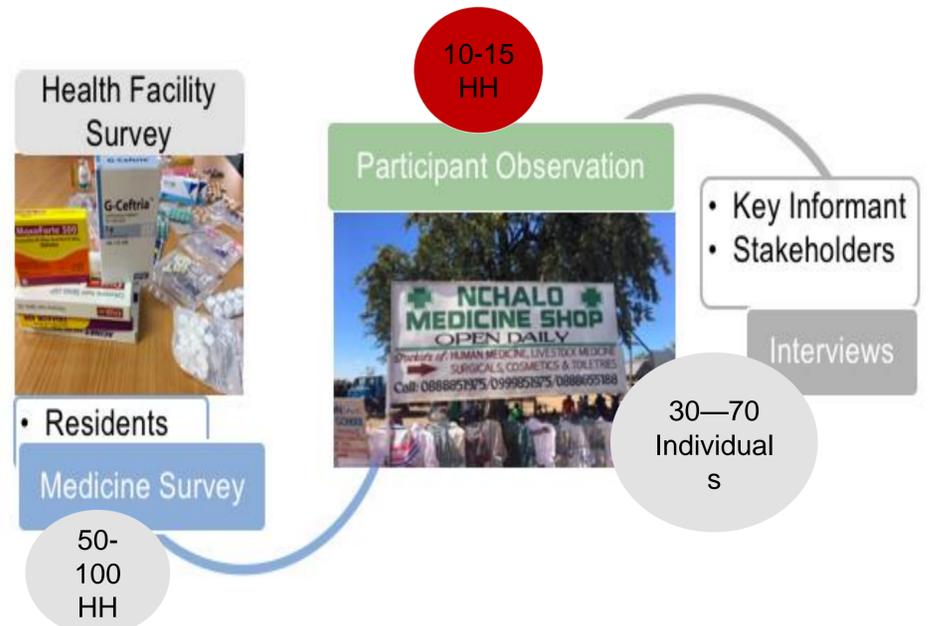
Overall aim

To ethnographically explore the roles of antimicrobials in fever case management within and beyond the health facility setting in Chikwawa, Malawi.

Specific:

- To compare availability and prescription of antibiotics before and after introduction of RDT;
- To describe how fevers become classified in practice;
- To establish number and different kinds of antimicrobials being accessed and used;
- To shed light upon the roles of these antimicrobials on livelihood

Methods



Significance

- Inform AMR National Policy
- Doctorate degree

Reference

- Hopkins et al, 2017. Impact of rapid diagnostic test for malaria on antibiotic prescribing: analysis of observational and randomized studies in public and private healthcare settings *BMJ* 356:j1054
- Johansson et al, 2016. Integrated paediatric fever management and antibiotic over-treatment in Malawi health facilities: data mining a national facility census
- O'neil J, 2016. Tackling drug resistant globally: final report and recommendations
- Nditunze et al, 2015. Assessment of Essential Medicines Stock-Outs at Health Centers in Burera District in Northern Rwanda. *Rwanda Journal Series F: Medicine and Health Sciences*
- Wageneer et al, 2014. Stock-outs of essential health products in Mozambique-longitudinal analyses from 2011 to 2013. *Trop Med Int Health*
- Kanyoma K E, 2013. The Impact of Procurement Operations on Healthcare delivery: A case study of Malawi's public healthcare delivery system.
- Chandler, C, E Hutchinson, and C Hutchison. 2016. Addressing Antimicrobial Resistance Through Social Theory: An Anthropologically Oriented Report.
- Whyte, Susan Reynolds, Sjaak Van der Geest, and Anita Hardon. 2002. *Social lives of medicines*: Cambridge University Press.
- Ilovo Sugar Company, 2016. Human Capital Report 2015/2016.
- National Statistical Office - NSO/Malawi and ICF Macro. 2011. Malawi Demographic and Health Survey 2010. Zomba, Malawi: NSO/Malawi and ICF Macro.

Acknowledgments