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Building Capacity for Pharmaceutical Services Where Pharmacies Do Not Exist: The ADDO Experience in Tanzania

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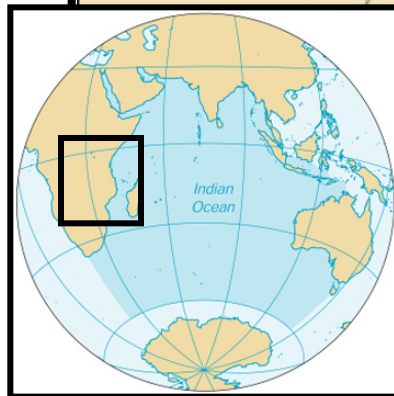


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Learning Objectives

- Describe how Tanzania's innovative accredited drug dispensing outlet (ADDO) program created a new class of health care providers to help underserved populations
- Understand what actions must be taken to effectively train, accredit, supervise, and inspect a new category of medicine dispensers
- Describe how the ADDO program is providing a platform for strengthening community-based health care intervention through the private sector



Tanzania

Demographics	Tanzania
Area (square km)	945,100
Population	32,900,000 25% urban
GNP per capita	USD 240
Human development index	0.358 (150/174)
Literacy rate	Male: 84% Female: 65.7%
Infant mortality rate	94.8 per 1,000
Life expectancy	47 years

Source: United Nations Development Programme, 1999; World Bank, 1999



Most People in Developing Countries Obtain Medicines from Retail Drug Sellers

- In Africa, people usually buy medicines from most convenient source, generally the local pharmaceutical dispensing outlet—in Tanzania, *duka la dawa baridi* (DLDB)
- DLDBs authorized by the Tanzania Food and Drugs Authority (TFDA) to provide nonprescription medicines in the private sector
- DLDBs dot the country, especially in rural areas where the number of licensed pharmacies is extremely limited



Pharmaceutical Services Providers in Tanzania

- Tanzania has 499 licensed pharmacies
 - 60-70 percent are located in four major cities—Dar es Salaam, Arusha, Mwanza, and Mbeya
- There are more than 4,600 DLDBs
- For the entire country (21 regions), there are 600 pharmacists in both public and private sectors, including academia and the pharmaceutical industry



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Drug Sellers—The Problem

- Unqualified, untrained staff
- Unknown product quality
- Unreliable source of pharmaceuticals
- High prices
- Inadequate regulation
- Insufficient variety of legally available medicines





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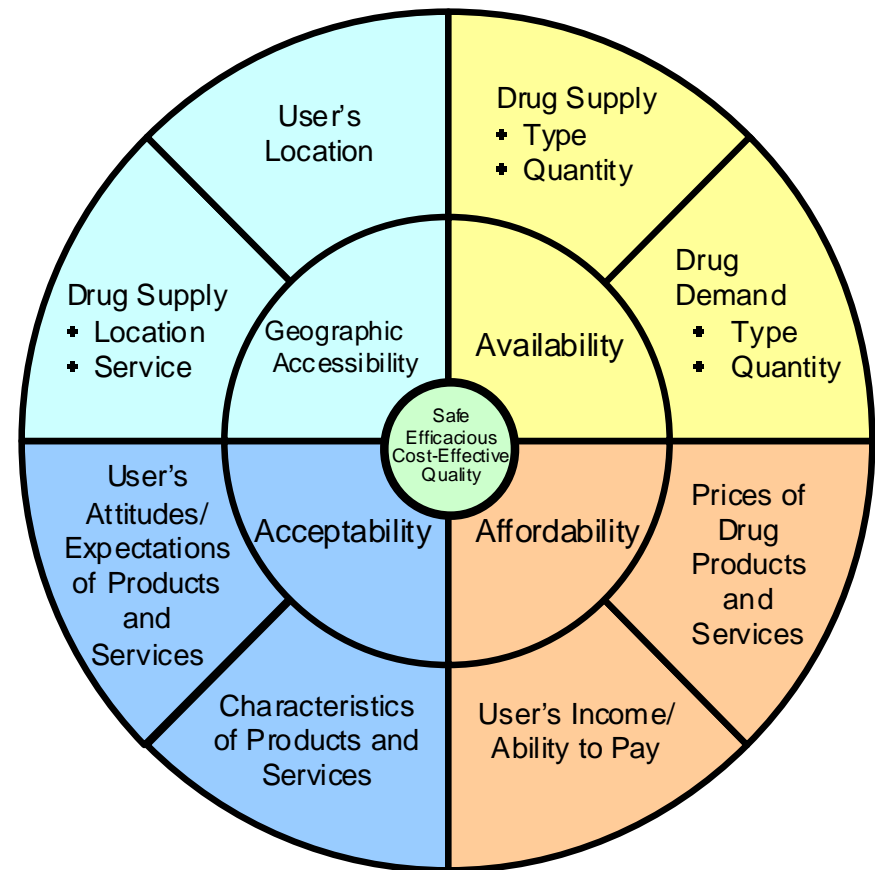
Problems of Duka La Dawa Baridi





Developing the Strategy (1)

Access Framework



Source: *Strategies for Enhancing Access to Medicines (SEAM) Program, 2000*



Developing the Strategy (2)

- Gain broad-based support from all stakeholders
 - National and local authorities, public and private sectors
 - Participatory approach to project design and implementation
- Create new level of health service provider
 - TFDA regulations and standards of practice
 - Accredited Drug Dispensing Outlets (ADDOs)
 - Licensed owners and dispensers



Developing the Strategy (3)

- Change behavior of shop owners and dispensers
 - Training (both business and dispensing skills)
 - Incentives (loans, mentoring, expanded list of legally sold drugs, marketing)
- Improve quality of products and services dispensed
 - Use local strategy for regulation and inspection
 - Licensed wholesalers, TFDA-approved products
- Improve public and customer awareness



Select Requirements to become an ADDO

- Personnel training and continuing education for owners and dispensers
- Shop location and building design/layout
- All medicines sold must be registered by TFDA
- Stock control and handling
- Sanitation and hygiene of the premises and personnel
- Record keeping



Before—
DLDB



After—
ADDO





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Before—
DLDB



After—
ADDO





Preparing Dispensers for ADDO Responsibilities—Training Processes

- All dispensing staff must be accredited through Ministry of Health (MoH)/TFDA-approved dispenser's course
- The four-week training curriculum was developed by Muhimbili University College of Health Sciences School of Pharmacy and is conducted jointly with TFDA and MSH
- The entry-level educational requirement for ADDO dispensers is that of a nurse assistant (one year of training) or above



Training Standards

- The ADDO dispenser's curriculum covers six modules, including—
 - Laws, regulations, and dispensers ethics
 - Good dispensing practices and rational medicines use
 - Common medical conditions in the community
 - Reproductive health and HIV/AIDS
 - Communication skills and counseling
 - Child health
- Plans are underway to institutionalize ADDO dispenser's course into MoH Zonal Health Training Institutes



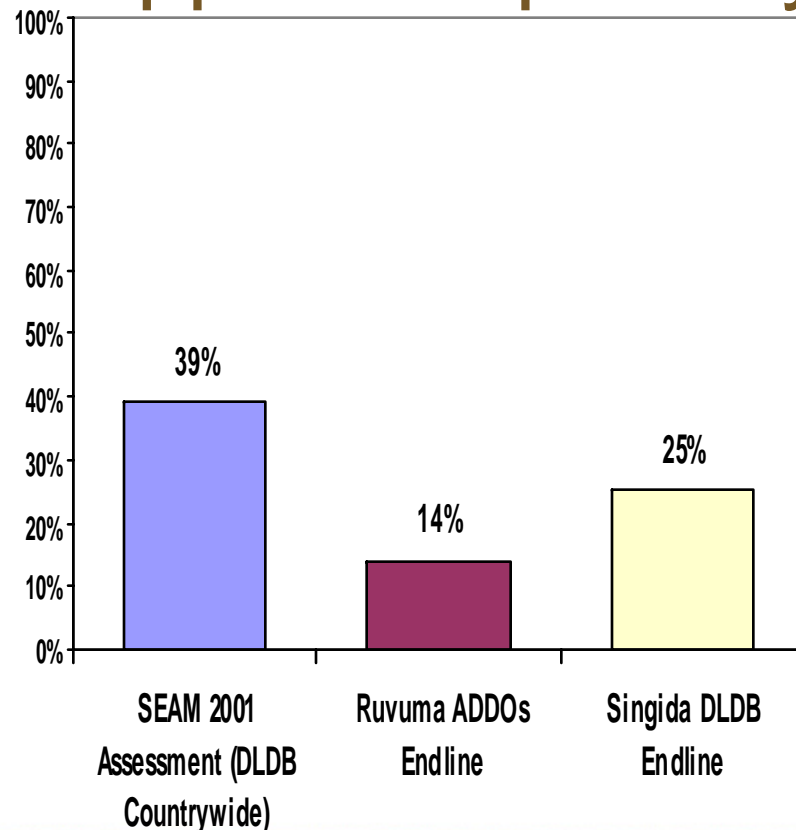
Dispensers' Basic Tasks

- Dispensing the correct medicine every time
- Dispensing quality medicines
- Encouraging clients to go to the health facility (referrals) when needed
- Advising and educating clients
- Serving clients politely
- Keeping records





Decrease in Inappropriate Recommendation of Antibiotics for Upper Respiratory Tract Infection (URTI)



Endline data showed inappropriate antibiotic dispensing for URTI by ADDOs in the pilot region was 14%. In a 2001 countrywide baseline assessment, inappropriate dispensing by DLDBs was 39%. At endline in the control region, 25% inappropriate dispensing was found.

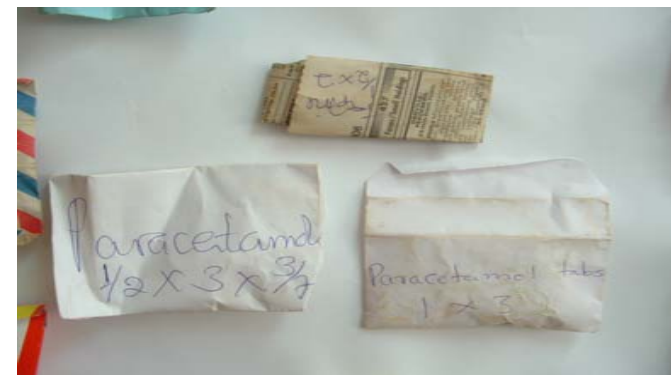
Source: Management Sciences for Health. 2005. *SEAM Tanzania Final ADDO Report*.



High Rates of Referral and Medication Instruction

2006 assessment of ADDOs in Ruvuma and Morogoro regions showed—

- 87% of the dispensers gave oral instructions and some written notes on how to take medications
- 95% of dispensers referred patients to a doctor or clinic when there was a general danger sign



Source: Centre for Enhancement of Effective Malaria Interventions (CEEMI), Tanzania. 2007. *Improving Child Health through the Accredited Drug Dispensing Outlet Program: Baseline Survey from Five Districts in Tanzania.*



Recommendations to Treat a Child with Non-Bloody Diarrhea

- In the same 2006 Ruvuma and Morogoro assessment, 97% of dispensers provided the recommended oral rehydration solution
- However, 89% of dispensers still provided antibiotics

Source: CEEMI, Tanzania. 2007. *Improving Child Health through the Accredited Drug Dispensing Outlet Program: Baseline Survey from Five Districts in Tanzania.*



ADDO as Platform for Expanding Community-Based Health Care Interventions (1)

Expanding
Access to ACTs

Tanzania's National Malaria Control Programme national strategy recognized ADDOs role in increasing access to artemisinin-based combination therapies (ACTs) to rural children under five years old. RPM Plus is supporting the President's Malaria Initiative to deliver 600,000 treatment doses of subsidized ACTs.

Integrating Child
Health/IMCI

ADDOs' expanded focus on child health comprises key Integrated Management of Childhood Illness (IMCI) interventions, including training dispensers in rational medicines used for malaria, acute respiratory infection, and diarrhea; community mobilization and providing supervision, monitoring, and evaluation.



ADDO as Platform for Expanding Community-Based Health Care Interventions (2)

Linking ADDOs to
Community-
Based HIV/AIDS
Palliative Care

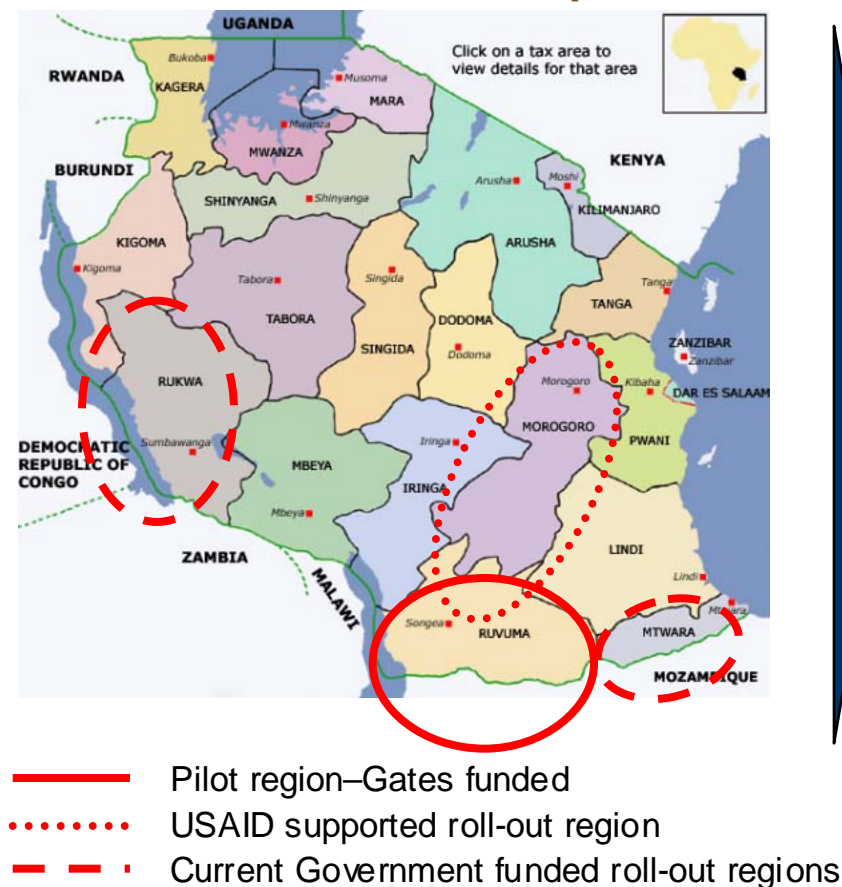
- Distribute HIV/AIDS information
- Support referrals to HIV/AIDS services
- Support home-based care kits distribution
- Improved access to opportunistic infections medicines

Contributing to
the National
Policy Priorities

- National Strategy for Growth and Reduction of Poverty (2005)
- National Health Policy (2003)
- National Medicines Policy (Draft 2005)



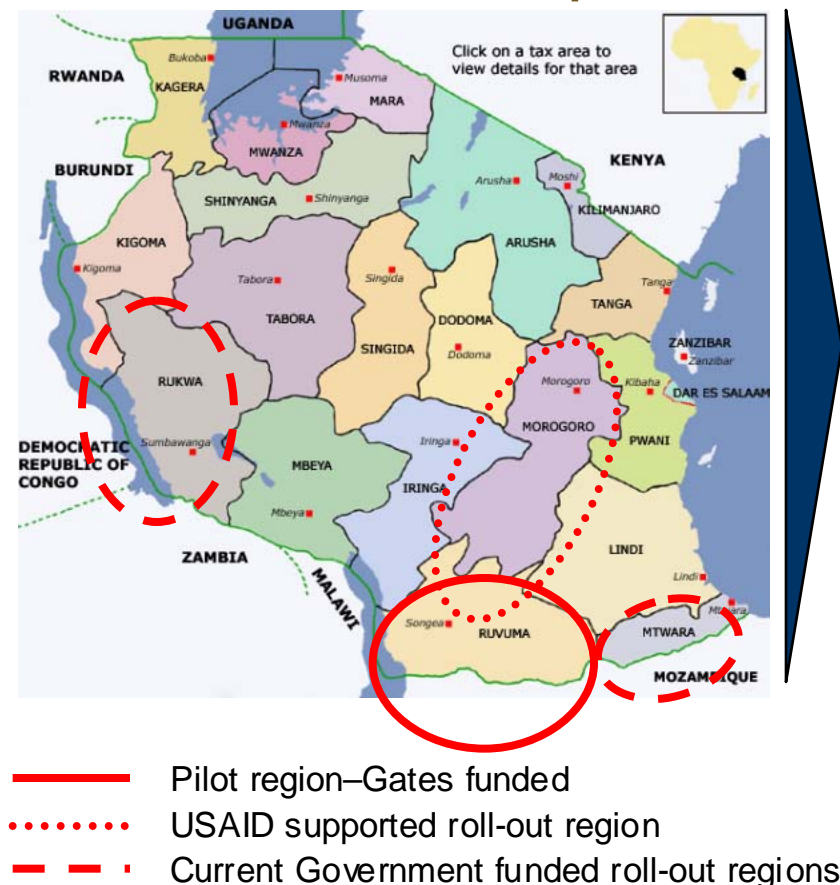
ADDO Scale-Up: Where Things are to Date (1)



- Out of 21 regions in the mainland, 17 remain unreached
- Expansion of ADDOs to additional regions has been included in Medium-Term Expenditure Framework 2007/2008 and Global Fund Round 7 grant proposal
- 702 ADDOs have been accredited; 746 more are expected by December 2007



ADDO Scale-Up: Where Things are to Date (2)



- As of August 2007, 1,373 dispensers and 828 owners have been trained
- As of August 2007, 660 district and ward-level inspectors have been trained in two regions
- As of May 2007, 102 owners in Morogoro were successfully approved for “micro-loans” from National Microfinancing Bank worth USD \$62,000



Lessons Learned and Conclusions

- Pharmaceutical services in developing countries can be substantially improved through training, accreditation, and regulation of private sector drug sellers. Even prescription medicines can be rationally dispensed at grassroots drug outlets.
- Challenges remains on how to rapidly scale up medicine dispenser training nationwide and the institutionalization of the ADDO Dispenser's Course into MoH Zonal Health Training Institutes.



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DUKA LA DAWA MUHIMU



Ni rafiki wa kuaminika