DUKA LA DAWA MUHIMU

# ADDO NEWS

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**Platform for Stakeholder Voices**




## Inside this issue


- The Gates Foundation team visits ADDOs in Tanzania
- Pharmacy Council reaches out to development partners
- Editor's note
- Quality of medicines in ADDOs receives clean bill of health
- ADDO providers devise a system for self-regulation
- Pharmaceutical personnel in Dar es Salaam introduced to PC ICT system
- ADDOs demonstrate potential to contribute more to malaria control
- Stakeholders commend initiatives to enhance ADDO sustainability
- Kibaha District shows the way to linking ADDO, CHW and health facility services
- CHAWAMAMU shares role in ADDO implementation



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## The Gates Foundation Team Visits ADDOs in Tanzania



*The Gates Foundation Delegation at an ADDO in Kibaha District.*

Towards the end of July 2014, Tanzania was privileged to host a high-powered delegation from the Bill and Melinda Gates Foundation, which was on a mission to visit some of the health projects funded by the Foundation in the country.

The delegation was led by Dr. Trevor Mundel, the foundation's President for Global Health, accompanied by other senior staff of the foundation; Dana Hoving, the Director of Integrated Delivery; Dean Katz, Senior Communications Officer; Mike Poole, Director of Global Health; and Mara Hansen, Program Officer overseeing private providers in primary healthcare.

Since early 2000, the Gates Foundation has supported implementation of the accredited drug dispensing outlet programme, an innovative public-private partnership initiative which has enabled millions of Tanzanians in the traditionally under-served rural and peri-urban areas to access quality essential medicines.

Thus, the delegation's mission would not have been complete without a visit to the drug shops, to witness some of the results of the successful cooperation between the foundation and the government and people of Tanzania. With guidance from senior Pharmacy Council and MSH staff, the delegation got its way to ADDOs in Kibaha District, some 34km from Dar es Salaam.

During the visit, the visitors interacted freely with ADDO providers, and also held discussions with senior members of the district health management team to learn more about ADDO services. The delegation also paid courtesy calls to senior officials of the Ministry of Health and Social Welfare, TFDA and Pharmacy Council, where it commended the government for its leadership and stewardship, which made national rollout of the program possible.

## Pharmacy Council Reaches Out to Development Partners

On 9th July 2014, the Pharmacy Council of Tanzania (PC) convened a meeting with different development partners drawn from both the public and private sectors, at the New Africa Hotel in Dar es Salaam. The meeting was officiated by Dr. Donan Mmbando, the government's Chief Medical Officer, flanked by Mr. Henry Irunde, the government's Chief Pharmacist and Ms. Elizabeth Shekalaghe, the Registrar of the Pharmacy Council.

Other participants included representatives from different UN agencies (WHO, UNDP and UNFPA); senior program officers from international organizations such as The Global Fund, Management Sciences for Health (MSH), John Snow Inc. (JSI) and Clinton Health Access (CHAI); senior managers from the Medical Stores Department; Pharmacy Council staff; a senior representative from the association of national pharmaceutical wholesalers; and private contractors such as ITIDO and MediaNet, supporting the Accredited Drug Dispensing Outlets (ADDO) program through the MSH's Sustainable Drug Seller Initiatives (SDSI) project.

The objectives of the meeting were to enlighten the stakeholders about PC's activities following expansion of its regulatory mandate with enactment of the Pharmacy Act 2011, strengthen institutional networking, explore opportunities for collaboration and partnerships, and solicit support for different activities of the council including implementation of the ADDO program.

While opening the meeting, the Chief Medical Officer underscored the need for close collaboration and partnership between the government and development partners (the private sector included), noting that it was the best way to leverage resources for development including delivery of healthcare services. The remarks were echoed by the Chief Pharmacist who commended the PC leadership for taking the initiative to bring together stakeholders to discuss ways of working together.

During the meeting, the registrar of the Pharmacy Council together with her team took the participants through the PC Strategic Plan (2013 – 2018), highlighting key priorities, strategies for their realization and areas where external support was needed. The council also shared various initiatives it was undertaking to improve efficiency in service delivery, such as use of the modern information and communication technology for information gathering, monitoring, reporting and even collecting regulatory fees.

Stakeholders responded by indicating specific areas where they would like to work together with the council. They were also united in commending the council for reaching out, noting that without the meeting, many of them would not have learnt of the existing opportunities for collaboration and partnership.



*Development partners at the stakeholders meeting convened by the Pharmacy Council.*

# Editor's note

Welcome to the second issue of *ADDO News*, a quarterly newsletter that provides a platform for stakeholders to share experiences in implementation of the ADDO program.

In this issue, we continue to celebrate 10 years of successful implementation of the program, as stakeholders gather in Arusha City to take stock of achievements and explore opportunities for the future. However, the celebrations would be short-lived without tangible measures to maintain the implementation quality and sustain gains made through heavy investments in the program.

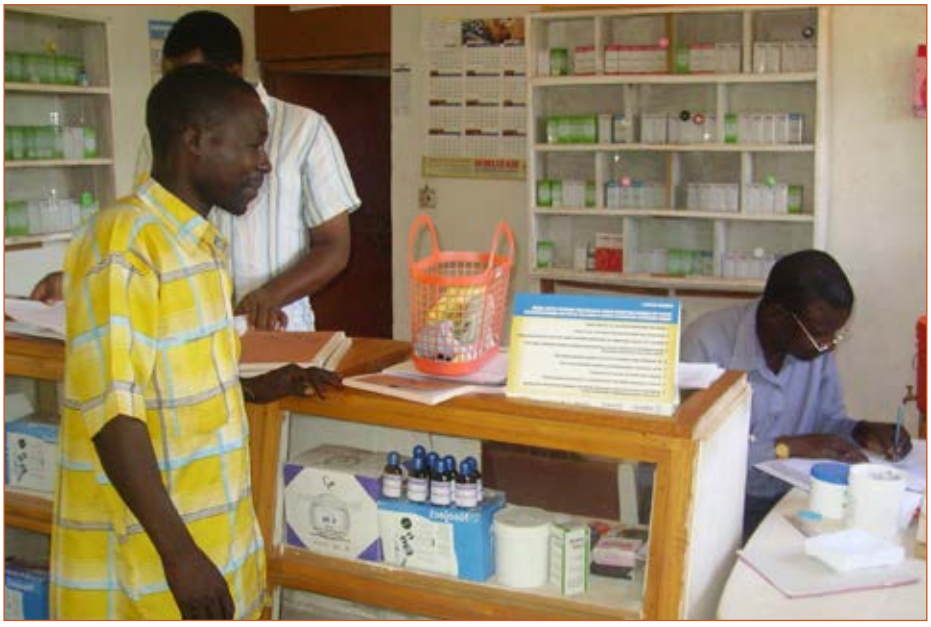
We are therefore pleased to highlight some of the interventions initiated through collaboration among different stakeholders, to enhance sustainability of the program. The interventions cut across the need for more efficient regulation of ADDOs and other pharmaceutical services and greater involvement of the private sector in continuous development of the program.

The interventions include integration of the modern information and communication technology (ICT) use in ADDO program management, with emphasis on increased efficiency in information gathering, information processing, information sharing and information use in decision-making, as well as use of mobile payment systems for collection and disbursement of regulatory fees.

Other initiatives are: institutionalization of ADDO trainings in both government and private training institutions to ensure continuous output of skilled dispensers; strengthening of the regulatory system with emphasis on the ADDO ward inspection system; strengthening linkages between ADDOs, community health workers and health facility providers; strengthening the capacity of ADDO provider associations to increase their role in implementation of the program; and investment in operational research to characterize medicine practices and use in the communities served by ADDOs, so as to inform policy and planning of interventions geared toward promoting appropriate use of medicines.

These initiatives are supported by the Bill and Melinda Gates Foundation through the Sustainable Drug Seller Initiatives (SDSI) program implemented by Management Sciences for Health (MSH) through close collaboration with the Pharmacy Council of Tanzania. We thank the foundation for the generosity and for remembering to visit ADDOs in Tanzania. We also thank other development partners who have made tremendous contributions to ADDO implementation and commend those who have made commitments to support the Pharmacy Council to sustain the program

## Quality of Medicines in ADDOs Receives Clean Bill of Health



A recent study by Muhimbili University of Health and Allied Sciences (MUHAS) School of Pharmacy analysed 243 samples of 9 different types of medicines collected from 24 randomly selected ADDOs and 8 randomly selected pharmacies in Morogoro, Tanga, Singida and Mbeya regions. The samples included antibiotics, antimalarial, anti-inflammatories/analgesics and oxytocics. Out of the 243 samples, 170 (70%) were in solid dosage form (tablets and capsules), while 73 (30%) were in liquid dosage forms (syrups, suspension and injections).

Most of the samples (203) were collected from ADDOs and the remaining 40 from pharmacies. There was no physical damage, contamination with dirt marks, or cracks on any of the samples investigated. Testing procedures involved physical examination (appearance, packaging, labelling and expiry) and analysis using proven analytical laboratory techniques.

The study revealed that the majority of medicines collected from ADDOs and pharmacies met quality standards. Specifically, all quinine, co-trimoxazole and amoxicillin passed quality tests. However, seven ALu samples gave doubtful results during the first round of testing using the semi-qualitative minilab thin layer chromatography (TLC) method, and were subjected to a confirmatory test using the liquid chromatography method, and all the samples subsequently passed the test. Two paracetamol samples failed disintegration time, while all ergometrine injection samples failed the essay.

In overall, the study showed that 92.6% of all the 243 products tested met quality standards, while only 7.4% failed. The failure of egormetrine samples was attributed to the product's high sensitivity to tropical temperatures and light. Out of the 16 ergometrine samples analysed, 13 were collected from ADDOs and 3 from pharmacies. Thus, the overall failure rate was 6.4% (13/203) in ADDOS and 7.5% (3/40) in pharmacies. The fact that ergometrine from both ADDOs and pharmacies failed the essay suggests non-adherence to good storage practices.

Consequently, the study urged wider stakeholder consultations to come up with strategies to increase good storage practices, especially maintenance of cold chain, and perhaps consider substituting ergometrine with a more temperature stable product, in the list of ADDO products

***93.6% of medicine samples collected from ADDOs passed quality test.***

# ADDO Providers Devise a System for Self-Regulation

Between July 2013 and August 2014, Management Sciences for Health through the Bill and Melinda Gates Foundation–funded Sustainable Drug Seller Initiatives project, supported various interventions to foster establishment of ADDO provider associations (APA) and strengthen their capacities to contribute to the maintenance and sustainability of ADDO programme. The interventions included sensitisation of ADDO providers on the roles, benefits and responsibilities of associations, and distribution of educational materials and basic management tools.

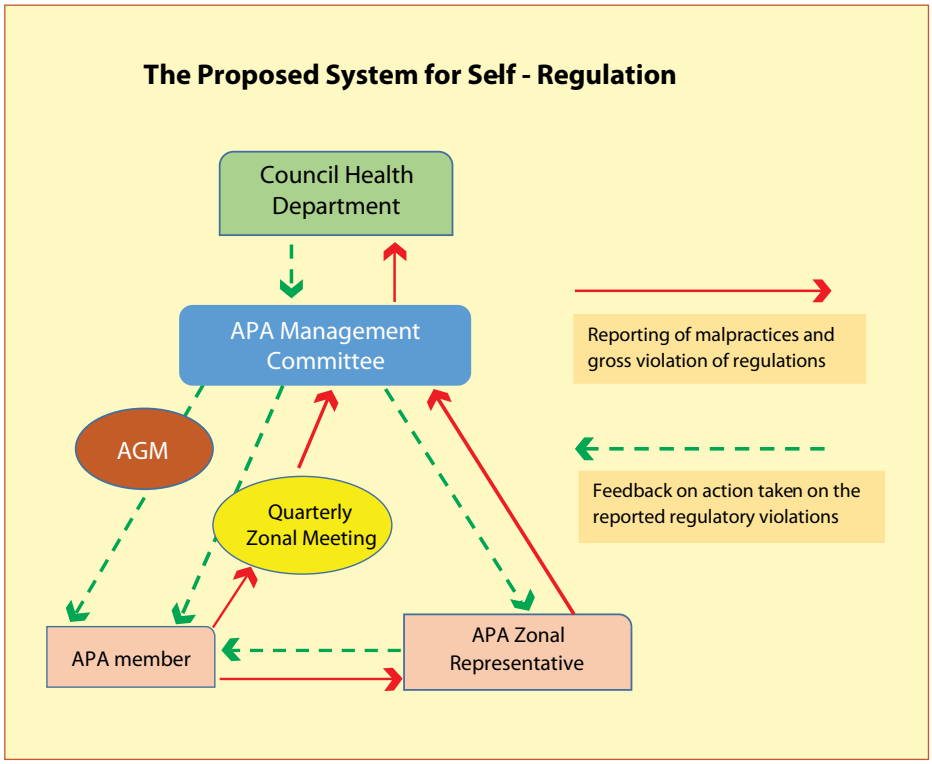
Emboldened by the interventions, some of the associations have taken steps to establish mechanisms for self-regulation and peer supervision, as part of the efforts to promote compliance with the established ADDO regulations and standards and ensure delivery of quality medicines and services to the population.

In the districts where the SDSI interventions were concentrated (such as Mbinga, Kilombero, Mbarali and Bagamoyo), associations have come up with a system for self-regulation, which will ensure that ADDO providers play a more proactive role in reporting malpractices and gross violation of regulations. The system will also ensure that association officials and council authorities are held to account on cases of regulatory violations reported to them.

Furthermore, the system provides every ADDO provider with two avenues (APA zonal representative and quarterly zonal meetings) for reporting regulatory violations to the association's management committee, which in turn reports to the council health department in writing, so that appropriate corrective action(s) can be taken by the council authorities. Feedback is channelled to ADDO providers through the existing association structures.

The system is a marked departure from the common practice whereby ADDO providers would verbally report to council officials (mostly district pharmacists), regulatory violations observed in their respective areas. Experience has shown that many a time, such reports go unattended, often leaving the informers with fear of victimisation or suspicion as to why no action was taken at all.

Council officials agree that at times it is not very easy to act on every verbal report received from the providers due to operational constraints at the council level. One district pharmacist explains that in most councils, there is only one vehicle assigned to the health department and that vehicle is known as "*Gari la DMO*" (district medical officer's car). To get the vehicle and have it fuelled for a field activity, there must be a very compelling reason.




Thus, most district pharmacists support the self-regulation system, noting that it will enable the leadership of the associations to verify reported regulatory violations through their representatives at the zonal level, and also properly document the cases before forwarding them to the councils for action. "*When the council health department receives such a report and a written request for action from ADDO association, I think it will be very hard to ignore it*", says a district pharmacist whose identity is withheld.

However, functionality of the system will depend greatly on effectiveness of the associations' leadership structures (management committee and zonal information and coordination centres), as well as the Annual General Meeting (AGM) and quarterly zonal meetings, which are key platforms for membership engagement, planning, reporting and mobilisation of financial contributions. A zone in the associations' context consists of 3-4 wards.

To complement the system, some associations such as CHAWAMAMU in Mbarali, UWAMADAMUDA in Dar es Salaam and RUDDOA in Songea Urban, have also initiated periodic peer supervision activities, to monitor practices of ADDO providers and offer guidance as appropriate, for improved compliance with regulations and standards.

In Mbarali, CHAWAMAMU has formally established a peer supervision sub-committee which is answerable to the central committee. The sub-committee consists of 10 members who are ADDO owners also trained as dispensers, hence fully understand both the commercial and technical aspects of the ADDO enterprise. The association conducted its first round of peer supervision visits in early June 2014, starting with four remote wards which are hardly reached by inspectors. It shared the activity report with the district council and was well recieved.

In Songea Urban, RUDDOA rollout peer supervision activities in early July and received much moral support from senior council officials including the municipality mayor; while in Dar es Salaam, UWAMADAMUDA has been going from street to street since 9th June 2014. The exercise entered its 10th week on 11th August 2014 and is scheduled to cover all the districts and wards in the city before the end of the year.

***The system will ensure that ADDO providers play a more proactive role in reporting malpractices and gross violation of regulations, while holding regulatory authorities to account on the reported violations.***

# Pharmaceutical Personnel in Dar es Salaam Introduced to PC ICT System



The Pharmacy Council of Tanzania has embarked on a major programme to digitise its regulatory system, as part of a wider strategy to increase efficiency in service delivery. The efforts are informed by the rapidly growing use of the modern information and communication technology (ICT) in the country, especially mobile phone technology, and increased demand for real time access to information. At the policy level, the efforts are anchored on the national e-Government strategy which aims to accelerate efficient delivery of quality and responsive services to citizens and businesses.

Consequently, the Pharmacy Council, with support from MSH through the Sustainable Drug Seller Initiatives project, has developed a comprehensive integrated mobile information system that cuts across its various regulatory and functional needs. The system consists of four major components; web-based database, mobile indicator reporting module, mobile payment component and mobile information exchange module. The system has been developed with technical assistance from Invention and Technological Ideas Development Organization (ITIDO), an IT company commissioned by the SDSI project to support the PC technology efforts.

On 19th July 2014, the Pharmacy Council in collaboration with MSH and ITIDO convened a meeting at Karimjee Hall in Dar es Salaam, to introduce the system to various pharmaceutical personnel in the city. The participants included pharmacists, pharmaceutical technicians and interns.

While opening the meeting, Ms. Elizabeth Shekalaghe, the Registrar of the Pharmacy Council pointed out that the mobile technology is an extremely useful invention that can no longer be ignored. To demonstrate the usefulness of the technology, the registrar observed that most of the meeting participants had been invited through mobile phone short text messages, a proof that the technology is effective in reaching audiences.

During the meeting, the participants were taken through all the modules of the PC integrated mobile information system and demonstrations made to show how the system works. To make the process more participatory, the participants were shown how to make mobile payments and how to access use the helpline to make enquiries. Most of them were able to make payments through the system and received confirmation on the spot that their funds had been received by the Pharmacy Council.

The Participants were also asked to send enquiries to the database through their mobile phones and received personalised responses to their questions. The information exchange module is pre-configured with answers to the short codes that people send to the database. The short codes represent various categories, and the database sends a prompt response to one's query. The system is designed to be compatible with basic phones.

Furthermore, the participants were introduced to the Pharmacy Council's new website address (www.pctz.or.tz) and provided with hotline numbers which they can use to get information or access the database.

For making mobile payments, the Pharmacy Council's pay bill number is 900800. Although the system is currently working with Vodacom's Mpesa only, plans are underway to incorporate other mobile money service providers.

Commenting on the system, the participants commended PC for the efforts, but raised concerns about its sustainability, frequency of updating data and cyber security. The Pharmacy Council explained that the system was still being piloted and some of the concerns would be addressed during external evaluation of the system's functionality and security.

# ADDOs Demonstrate Potential to Contribute More to Malaria Control

Malaria is one of the worst humanity diseases. The World Health Organization estimates that 3.4 billion people (half of the world's population) are at risk of malaria. In 2012, there were about 207 million malaria cases and an estimated 627,000 malaria deaths. Among these were 460,000 children in Africa who never lived to see their fifth birthday.

In Tanzania, 93% of the population on the mainland lives in areas where malaria is transmitted. Although there is a marked reduction in malaria prevalence on the mainland (from 41% in 2007 to 9% in 2012), malaria remains the leading cause of health facility attendance, admissions and deaths.

Among the major national malaria control strategies are case management through early diagnosis and treatment using Artemisinin-based Combination Therapies (ACTs) for uncomplicated malaria and SP for intermittent preventive treatment to pregnant women; and integrated malaria vector control through the use of insecticide-treated bed nets, indoor residual spraying and larva control.

Accredited drug dispensing outlets have an important role in implementation of both malaria prevention and case management interventions. The drug shops are a source of insecticide treated bed nets and re-treatment kits. Participation of ADDOs in the Tanzania National Voucher Scheme (commonly known in Kiswahili as *HatiPunguzo*), also ensured that the groups most vulnerable to malaria (pregnant women and under-five children) accessed ITNs at a subsidized price.

Moreover, following the change in malaria treatment policy from SP to ACTs as the first-line treatment for uncomplicated malaria, Tanzania Food and Drugs Authority reviewed dispensing regulations to allow ADDOs to dispense ATCs. This has enabled millions of Tanzanians who depend on ADDOs as their first contact with healthcare services outside the home and a source of medicines, to access efficacious malaria treatment.

Introduction of ACTs in ADDOs provided a launching pad for the Affordable Medicines Facility-malaria (AMFm), an innovative subsidy scheme which increased availability of ACTs in the private sector by 56% (from 10% in 2010 to 66% in 2012) and reduced the median price of ACTs from about Tsh.4,500 to Tsh.1,500, thereby making the treatments more affordable to the population. ADDOs constitute a major part of the AMFm delivery mechanism.

With increased availability of ACTs and declining malaria prevalence, testing for malaria before treating the disease has become a major priority for the National Malaria Control Program (NMCP). The program's target is to provide universal access to appropriate, quality and timely malaria diagnosis to at least 80% of people with signs and symptoms of malaria by 2020.




In 2012, the NMCP changed its guidelines to state that all suspected malaria cases should be confirmed prior to treatment. Using a microscope to detect malaria parasites remains a cornerstone of malaria diagnosis throughout Tanzania, but is only available at hospitals and some health centers. Thus, malaria Rapid Diagnostics Tests (mRDT) were introduced to increase access to malaria testing in all healthcare facilities.

Early diagnosis and treatment of malaria reduces illness and prevents deaths. It also contributes to reducing malaria transmission. The World Health Organization asserts that **access to malaria diagnostic testing and treatment should be seen not only as a component of malaria control but as a fundamental right of all populations at risk**.

However, a study conducted by NMCP in Morogoro with support from Clinton Health Access (CHAI) revealed that only 9% of those who purchased an ACT at ADDO had previously received a positive malaria test result. About 71% of patients surveyed said that ADDO was the first place they sought treatment. It is estimated that 40% of Tanzanians seek treatment for fever in the private sector and most cases of fever are treated with an antimalarial.

Informed by this situation, NMCP with support from CHAI, took initiative to pilot low-cost malaria rapid diagnostic tests in ADDOs in Kilosa and Kilombero districts of Morogoro Region. In May 2013, the program trained 310 ADDO dispensers in both districts to perform mRDTs. The trainings were led by national and district level mRDT facilitators. Only those who passed three examinations were certified to perform mRDTs. Nearly all dispensers who attended the training (95%) passed examinations.

Quarterly monitoring visits were conducted to observe how the trained dispensers were performing mRDTs. Their ability to follow standard operating procedures was also monitored during the visits.

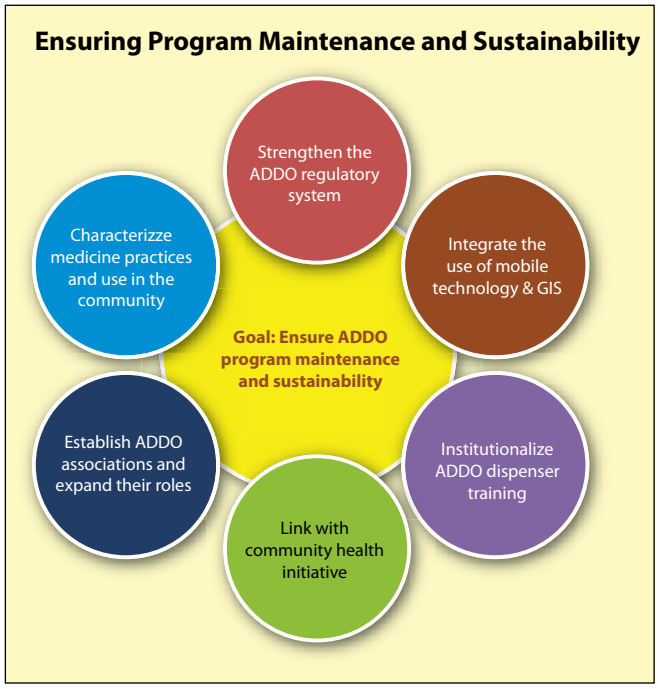
Evaluation of the pilot project conducted in early 2014 showed that in both Kilosa and Kilombero, nearly half of all fever patients (49% and 47%, respectively), and the vast majority of the eligible population (62% in Kilombero and 70% in Kilosa) got tested for malaria in ADDOs. In Mvomero District where the NMCP interventions were not applied, a marginal increase was observed (3% to 17%). The increase in Mvomero was largely attributed to nationwide awareness campaigns on malaria testing.

# Stakeholders Commend Initiatives to Enhance ADDO Sustainability

The Fifth National ADDO Stakeholders' Conference held in Arusha between 5th and 6th August 2014, discussed progress of the nationwide implementation of the ADDO program and commended efforts to ensure the maintenance and sustainability of the program. The meeting also shared results from different operational research activities to evaluate medicines access and use in communities served by ADDOs.

The sustainability initiatives include regulatory strengthening, institutionalization of ADDO training, integration of mobile technology in the program management, strengthening and expanding roles of ADDO provider associations in implementation of the program, and establishing linkages between ADDOs and other health service providers in the community. The interventions were supported by the Bill and Melinda Gates Foundation through the SDSI project implemented by MSH in collaboration with the Pharmacy Council.

The SDSI objectives are to: enhance accredited drug seller initiatives' long-term sustainability, contributions to community-based access to medicines and care, and ability to adapt to changing health needs and health system context; facilitate the spread of private-sector drug seller initiatives; and define and characterize information related to consumer access to and use of medicines and facilitate its use in developing public health policies, regulatory standards, and treatment guidelines.




In 2012, the project supported various situational and options analyses focusing on different aspects of the ADDO program (training, regulatory systems, supply chain, use of mobile technology, role of ADDO provider associations, community based initiatives and consumer advocacy), which informed development of the sustainability initiatives. Recommendations from the situational and options analyses were discussed at the 4th National ADDO Stakeholders Conference held in Tanga between 17th and 19th September 2013, and a decision was reached to implement priority interventions.

## Strengthening the Regulatory System

The 2012 situational analysis demonstrated potential of the decentralized regulatory system, but noted that the functionality of the system was generally weak. It was observed that in most councils, inspections were not taking place as regularly as stipulated in ADDO regulations; accreditation procedures were not strictly followed and the process was generally slow in most councils, leading to mushrooming of illegal ADDOs; misconduct was prevalent in some ADDOs; and inadequate communication between Council Food and Drug Committees (CFDCs) and ward inspectors was hampering regulatory oversight.

At the national level, the transfer of the overall program management from TFDA to the Pharmacy Council (PC) meant an urgent need to strengthen capacity of the Council (human resource, working tools, equipment, etc.) to be able to cope with its expanded regulatory oversight role, and also address information gaps in implementation of the ADDO program.

Among the measures taken at the national level included: hiring of two staff (one technical, one support) to support ADDO program activities; development of a web-based database to enhance collection and storage of information on drug outlets and personnel; development of mobile payment system to help increase collection of regulatory fees; development of electronic data collection tools to increase efficiency in documentation, monitoring and evaluation processes; review of ADDO regulations to reflect the expanded PC functions as stipulated in the Pharmacy Act of 2011; and development of client service charter to guide PC's response to client needs.

Two regions (Pwani and Mtwara) also benefited from SDSI support through establishment of a pool of regional and district inspector trainers; training of 278 ward inspectors in 14 districts (7 per region), reaccreditation of functional ADDOs in the 14 districts; accreditation of new ADDOs in both regions; and sensitization of ADDO providers (owners and dispensers) and pharmacists in Dar es Salaam and Pwani regions on the newly established Pharmacy Council ICT system.

## Integrating Modern ICT Use

The purpose of the modern ICT system is to improve efficiency in service delivery by facilitating the following key functions: communication with PC; reporting on key regulatory activities (e.g. training, supervision, inspection and accreditation) and services provided by ADDOs and pharmacies, including referrals; monitoring of personnel and premises; and payment of regulatory fees through mobile phone.

The system primarily consists of a web-based database and a mobile phone platform, both developed with technical assistance from ITIDO, the SDSI technology contractor. The system consists of four major components; web-based database, mobile indicator reporting module, mobile payment component and mobile information exchange module linked to a helpline support.

Various stakeholders were involved at different stages of developing the system. They included PC staff, members of the PC Management Board, premise owners, pharmaceutical personnel and ADDO dispensers. The system was piloted in Dar es Salaam and Pwani regions where drug shop owners, ADDO dispensers and pharmaceutical personnel were given orientation on how to use the system to obtain regulatory information, report on services and pay premise renewal and professional fees.

Results from the pilot showed that the system has been well received by the stakeholders especially ADDO dispensers.



*Participants of the 5th National ADDO Stakeholders Conference*

The dispensers in Pwani Region are currently using the system to report on a set of agreed service indicators including number of under-fives attended, under-fives with pneumonia, under-fives with diarrhoea, under-fives referrals and number of clients who received family planning pills within the reporting period. Some pharmaceutical personnel also used the system during and after the orientation trainings to pay professional fees to the Pharmacy Council. Currently the system is only linked to Vodacom's M-pesa but plans are underway to expand the platform to include other m-Money service providers.

Due to the interactive nature of the system, 1,167 short text messages (SMS) were sent out during trainings to drug shop owners, dispensers and professionals; 114 SMS were also received as testing during training; 223 SMS enquiries were received by PC via helpline, asking about different issues (dispenser training, medicines allowed in ADDO, renewal premise fees and how to make payments); and a total of 13,082 SMS were sent out during the pilot period as reminders, response to enquiries and notifications to ADDO providers and pharmacy owners and professionals.

The system also enabled PC to efficiently conduct preliminary and final inspection of new ADDO premises in the 7 districts of Pwani Region, using electronic inspection tools and tablets. Routine inspections were also conducted in the districts using the electronic system. Moreover, over the pilot period, PC was able to store records of 716 drug shops and 2,654 personnel (both ADDO and pharmacy dispensers) in the electronic database registry.

Through the SDSI support, PC now enjoys benefits of a functional ICT infrastructure powered by two big modern servers, uninterrupted power supply batteries, internet access and SMS connection with Push Mobile.

### Institutionalizing ADDO Trainings

Availability of a trained dispenser is a mandatory requirement for ADDO operation. Since introduction of the program, about 19,000 dispensers have been trained by TFDA and Pharmacy Council, with support from different development partners. Despite the efforts, dispenser shortage is a common problem in most areas. The shortage is attributed to various attrition factors including migration for economic and social reasons (e.g. change of employer, change of career, marriage, etc.); sickness/death; and lack of a reliable system for regular production of skilled dispensers.

Faced with this challenge, the Pharmacy Council with support from the SDSI project set out to explore options that would ensure availability of ADDO dispenser trainings using pharmaceutical training institutions. Situational and options analyses conducted by Pharmaceuticals Systems Africa (PSA) - the SDSI training contractor, recommended two options for the institutionalization: Option 1 would focus on institutionalizing the regular 35-day dispenser course in established training institutions; and option 2 would focus on a longer term training using a curriculum developed by the Pharmacy Council as National Technical Award (NTA) Level 4 course.

In April 2013, the Dar es Salaam based St. Peter's College of Health Sciences enrolled the first lot of students for the NTA Level 4 course, commonly known as Pharmaceutical Dispensing Certificate Course. The duration of the course is one year. Entry into the course is open to any ADDO dispenser who has successfully completed the 35-day dispenser training course, or a form four leaver (O level graduate) with at least a pass (grade D) in biology and chemistry. Upon completion of the course, successful candidates receive NTA Level 4 Certificate in Medical Dispensing. Such candidates may proceed to NTA Level 5 (certificate in pharmacy) which is a two-year course. In this way, the course opens up the career path for ADDO dispensers to advance in the pharmacy profession.

Apart from St. Peter's College of Health Sciences, five other colleges have been accredited so far by the Pharmacy Council to offer the course. They include Royal Pharmaceutical Training Institute, Dar es Salaam College of Health Sciences, City College of Health Sciences, Kam College of Health Sciences and Gataraye Research and Training Centre. All the colleges are located in Dar es Salaam. Institutionalization of the course will ensure continuous production of the dispensers in the market and help to reduce the chronic problem of dispenser shortage.

Regarding institutionalization of the regular ADDO trainings, the SDSI support focused on: building capacity of selected institutions to deliver the ADDO dispenser and owner training program; developing specific implementation plans for each institution including onsite and outreach training plans; conducting training of

*Continues on Page 9*

# Kibaha District Shows the Way to Linking ADDO, CHW and Health Facility Services

In June 2014, Kibaha District Council initiated activities to establish working linkages between Community Health Workers (CHWs), ADDO providers and health facility workers. The linkage is envisioned to improve the quality of services provided by CHWs and ADDO providers and expedite delivery of care especially to the most vulnerable population groups including newborns, under-five children, as well as antenatal and postnatal mothers. The initiative is supported by MSH through the Sustainable Drug Seller Initiatives Project.

Community health workers are key source persons in health promotion at the household and community levels. They have an important role in public health education, monitoring growth and development status of children, counseling caregivers on appropriate childcare, providing reproductive health information and services, and identifying sick people in the homes who need support and referral to health facilities. On the other hand, ADDOs are an important source of essential medicines in the community, and a significant proportion of the population also depends on the drug shops for advice as their first contact with health care services outside the home.

Currently, CHWs and ADDOs are both independently linked to health facilities but lack a formal relationship to one another. CHWs are trained to refer sick patients to health facilities for care, while health facilities supervise CHWs' work. ADDOs are also trained to refer severely sick patients to health facilities as well as patients who require medicines not available in the drug shops.

Linking ADDOs, CHWs and health facility providers can be highly beneficial to the community. Linkage between CHWs and ADDOs can increase chances for a child with pneumonia identified by a CHW to receive timely first dose of antibiotic from ADDO before arriving at the health facility for advanced care; and a child with severe diarrhea to receive timely doses of zinc and ORS from an ADDO when the health facility is far, closed or out of medicines.

Health facilities would also benefit from documented and coordinated referrals from CHWs and ADDOs, while ADDOs could profit from increased sales due to more customer traffic and periodic patient referrals by CHWs and recognition of dispensers' role in providing public health services. On the other hand, CHWs would benefit from greater recognition in the community for their role in connecting patients with prompt quality care and medicines.

Informed by these potentials, Kibaha District Council in collaboration with MSH and the Reproductive and Child Health Section of the Ministry of Health and Social Welfare (MoHSW) conducted a joint training for the three groups of service providers in June 2014, with emphasis on working together to improve maternal, newborn and child health services.

Among the topics covered during the training included: situation of maternal and newborn health in the district; status of ADDO program implementation; danger signs during pregnancy; danger signs after delivery; danger signs of sick newborns' video showing sick newborns with danger signs; family Planning methods commonly used in Tanzania; roles and responsibilities of ADDO dispensers, CHWs and health facility supervisors in this linkage; and networking among the three groups for improved healthcare in the community.

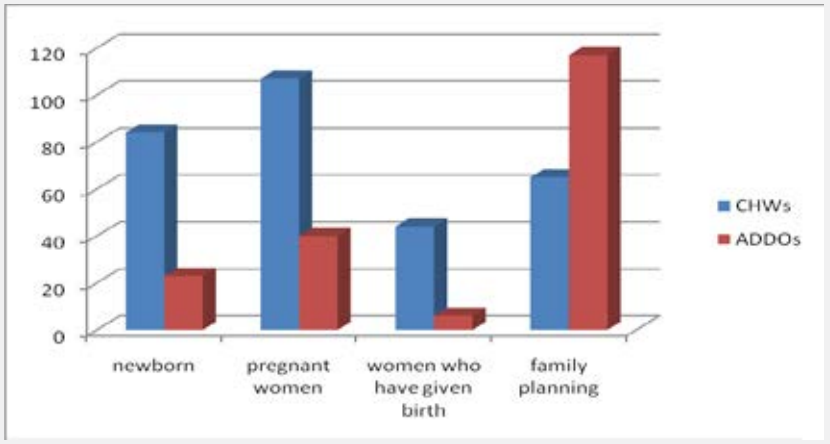
A total of 142 service providers were trained (40 ADDO dispensers, 85 CHWs and 17 facility providers) and 17 CHMT members sensitized and involved in various discussion sessions. Those trained were supervised in July 2014 to monitor their performance and provide guidance as appropriate.

Results from the supervision visits showed that the majority of the service providers were knowledgeable about family planning methods and danger signs of illness among newborns, pregnant women and postnatal mothers; and were referring patients to the next level of care. It was noted that the level of knowledge among the service providers did not differ significantly although health facility providers appeared slightly more knowledgeable than ADDO dispensers and CHWs.

In terms of service delivery, it was observed that ADDOs were leading in providing family planning services, whereas CHWs were mostly consulted on care for mothers and newborns. Out of 486 patients attended by ADDOs and CHWs during the monitoring period, 56 were referred to the health facility for care. However, only 31 out of the 56 referred patients (55%) attended primary health facilities; the lowest rate being reported among newborns (only 11% reached the facilities).

Given significant availability of private clinics in the district and proximity to a regional hospital, it was suspected that most neonates were taken to the regional hospital or private facilities for referral care. This further underscores the need to expand the linkage between ADDOs, CHWs and health facility providers in monitoring referrals. The supervisors did not visit private facilities nor the regional hospital to follow up referrals.

**Number of patients attended and referred by ADDOs and CHWs in Kibaha District Council between June and July 2014**



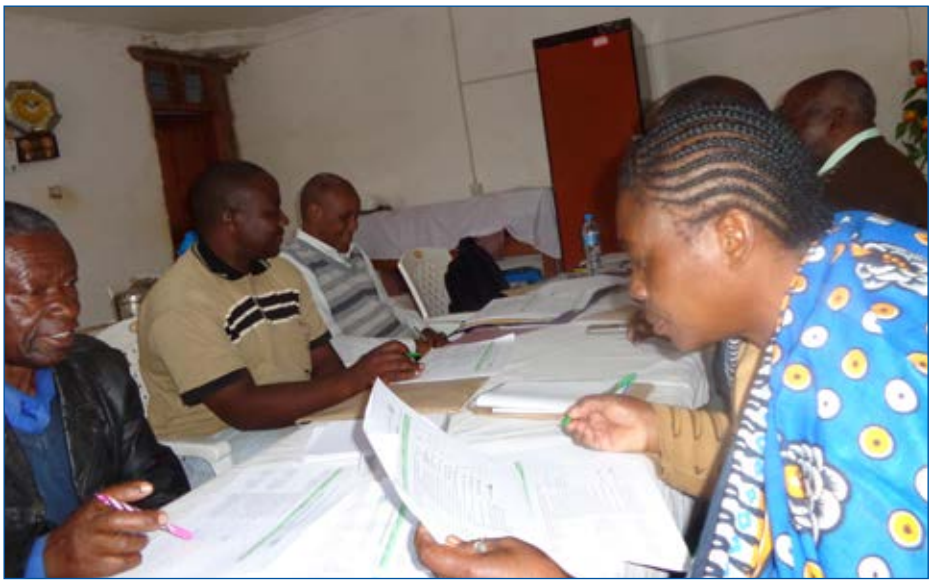
# Stakeholders Commend Initiatives to Enhance ADDO Sustainability

*... Continues from Page 7*

trainers (TOT) to enable each institution to offer both courses; and monitoring the quality of the trainings and documenting results and lessons for scale-up.

Seven institutions participated in the training of trainers and work-plan development processes. Among the institution were: Kigoma Clinical Officers Training Centre, Mtwara Clinical Officers Training Centre, Morogoro Public Health Nursing School, Bugando Medical Centre in Mwanza, Ruaha University College in Iringa, Kilimanjaro School of Pharmacy in Moshi, and St. Peter's College of Health Sciences in Dar es Salaam. The first four are government-owned Zonal Health Resource Center (ZHRC). Apart from St. Peter's College of Health Sciences, the rest of the training institutions have conducted at least one ADDO dispenser training.

Between November 2013 and July 2014 the 6 institutions had trained a total of 438 ADDO dispensers. The major lesson learnt from the efforts is that institutionalization of the ADDO trainings is feasible. The trainings are a potential source of funds to the institutions, which can be used to sustain their delivery.



*Training of ADDO association officials in Mbinga.*

### Strengthening and Expanding Role of ADDO Provider Associations

Since inception of the ADDO program, the role of ADDO provider associations has been emphasised. The associations are instrumental in providing a platform for common voices, empowering the members economically, promoting compliance with regulations, building institutional networks for collaboration and partnerships with other ADDO stakeholders, and improve relations among ADDO providers.

However, a situational analysis conducted by MediaNet Limited with support from the SDSI project, revealed several gaps and challenges in the establishment and management of associations. The major ones were: weak membership and leadership, limited scope of services to members, long and delayed process of registration, lack of basic facilities for formal operation, lack of management systems, and inadequate resource mobilization.

To enable the associations to realize their potential, the SDSI support focused on three key result areas: fostering establishment, strengthening operations and enhancing sustainability of the associations. In line with these priorities, various sensitization and training activities were conducted to various associations, with concentrated efforts in four learning districts (Bagamoyo, Kilombero, Mbarali and Mbinga). Efforts were also made to map associations nationally.

As a result of the SDSI support, 88% the targeted ADDO providers in the learning districts were sensitized on the roles, benefits and responsibilities of associations, 33 officials of 18 different associations were also sensitized, 37 associations were mapped nationally and basic information on their status of establishment documented, 33 out of 40 association officials in the four learning districts were trained in planning and effective management, and each of the 4 learning associations developed a three-year activity plan.

Major outcomes of the interventions included: a 78% increase in number of active association members in the four learning districts, a two-fold increase in contribution of funds by the active members, development of an elaborate system for self-regulation (described on page 3), successful peer supervision activities by 3 associations (CHAWAMAMU in Mbarali, RUDDOA in Songea Urban and UWAMADAMUDA in Dar es Salaam), improved working relations between associations and regulatory authorities at all levels, and movement toward formation of a national association.

### Characterizing Medicine Practices and Use in the Community

With support from the SDSI project, various cross-sectional studies were conducted by different institutions (Muhimbili University of Health and Allied Sciences, Harvard School of Public Health, Apetheker Consultancy [T] Limited, and Tanzania Consumer Advocacy Society) to characterize public and private sector facility-based medicine practices, care-seeking practices and attitudes regarding medicines and antimicrobial resistance (AMR) and professionals' perceptions and knowledge regarding medicines and AMR; and also test quality of medicines dispensed in ADDOs and pharmacies. The studies were conducted in Morogoro, Mbeya, Tanga and Singida regions between August 2013 and July 2014.

Approaches included dispensing record audits in 86 ADDOs and 13 pharmacies, mystery shopping in 306 ADDOs, 98 patient exit interviews, other key informant interviews (with 84 ADDO owners and dispensers, 43 government officials and 1,180 households), and analytical testing of 243 samples of 9 different medicines from ADDOs (203 samples) and pharmacies (40 samples).

Results from the mystery shopper survey showed that 85% of dispensers responded appropriately to pneumonia (referral, antibiotics, or request to see) and 61% made extra efforts to probe about the pneumonia cases compared to mild ARI (22%).

At the household level, 53% reported an acute illness in the previous 2 weeks, and about half (47.1%) used ADDO as their source of medicines. Product quality testing results showed that 93.4% of all samples passed the test. Only 16 samples (all ergometrine samples) failed the test.

Facility surveys revealed that ADDOs had much higher availability of pediatric formulations (suspensions) and about half of ADDO dispensing was from prescriptions. Both ADDO dispensers (49%) and health facility providers (88%) admitted to unnecessary antibiotic prescribing. Over 90% of dispensers knew that AMR is caused by unnecessary antibiotic use.




# CHAWAMAMU Shares Role in ADDO Implementation

*In this issue, we speak with Mr. Athumani Mhongole, the secretary of Mbarali District ADDO providers association (commonly known by its Kiswahili acronym-CHAWAMAMU), regarding the association's contributions in implementation of the ADDO program.*

**When was CHAWAMAMU formed?**

CHAWAMAMU was founded in April 2010 and got registered in March 2012 as a voluntary association, under the Ministry of Home Affairs.

**What are the conditions for membership?**

Any owner of a drug shop authorized to operate as an ADDO within Mbarali District, or any trained ADDO dispenser stationed in the district. The person must be at least 18 years old, of sound mind, and ready to pay an entry fee of Tsh.20,000 and monthly membership subscription of Tsh.5,000.

**What made you form the association?**

When ADDO program was introduced in our district in 2009, TFDA in collaboration with Mbarali District Council organized a training for ADDO owners, during which we were sensitised on the importance of having an association. We realized that through association, we can be able to speak in one voice on various issues regarding ADDO operations and services; through association, we can create a platform for structured engagement with regulatory authorities and other ADDO stakeholders; through association, we can defend our rights and support each other socially; and through association, we can be able to empower ourselves economically through establishment of SACCOS and other viable income generating activities. After the training, we continued with consultations among ourselves, which culminated in formation of the association in April 2013.

**What are your major accomplishments since establishment?**

Firstly, we have been able to grow our membership almost five-fold, from only 30 at formation to 133 by July 2014. This has made it very easy to coordinate ADDO activities in the district, since ADDO providers can be easily reached through the association.



***"We have been able to organize three successful ADDO trainings for drug shop owners and dispensers in our district and conducted peer supervision visits to over 40 ADDOs in four remote wards which are rarely reached by government inspectors."***

Secondly, we took relatively much shorter time than most associations to formally register our association. We have a constitution which guides all our activities, we have a democratically elected and capable leadership, we have an elaborate organization structure with adequate representation of our members wherever they are in the district, and we have a bank account and procedures for managing members' contributions. In brief, I can say that our association is well organized.

Thirdly, the association has been in the frontline in addressing various needs of members, such as following up accreditation certificates and licenses with relevant regulatory authorities, and organizing ADDO trainings whenever need arises. For example, in 2010 when we realized that there was a major shortage of dispensers in our district and ADDO owners were having difficulties operating the business, we liaised with the district council to organize dispensers' training, which was entirely financed by ADDO owners. Through the training, we produced 100 qualified dispensers. In 2012, we organized another training, this time for 32 ADDO owners in the district. In 2013, we organized yet another training for 54 ADDO dispensers to help meet increased demand for the service providers.

In the 2nd dispensers' training, we handled everything by ourselves, from course announcement to collection of fees, coordinating the interviews conducted by the Pharmacy Council and managing logistics during the entire training process. All the trainings were financed 100% by ADDO providers through the association. This, I think is a very important contribution to the ADDO program.

Fourthly, the association has embarked on an elaborate plan to promote compliance with ADDO regulations and standards and ensure delivery of quality medicines and services to the community. By so doing, we also hope to safeguard the reputation of ADDOs in the community and create a levelled ground for operation of the businesses, whereby every ADDO operator is made to comply with the established laws and regulations.

Consequently, we have come up with a system for self-regulation to encourage our members to play a more proactive role in reporting malpractices and gross violation of regulations, while the top leadership of the association makes close follow up with council authorities to ensure that appropriate corrective actions are taken against reported violations.

We have also created a system for peer supervision by establishing a ten-member peer supervision sub-committee to coordinate the efforts. In June 2014, we conducted peer supervision visits to over 40 ADDOs in four remote wards which are hardly reached by government inspectors. We shared the supervision report with the council health department, and was very well received.

**What are your future plans?**

We plan to establish a middle-level college which will be offering, among other courses, the one year pharmaceutical dispensing certificate course recently introduced by the Pharmacy Council. Our plan is to produce enough qualified dispensers for drug shops in our district and other parts of Tanzania too. We also plan to focus more efforts on economic empowerment of our members through engagement in other income generating activities.