Strengthening systems to prevent antimicrobial resistance: Results from the West Bank, Uganda, and Georgia

Wednesday, March 28th, 9:00-10:00 am EST (Washington, D.C.)

Strengthening systems to prevent antimicrobial resistance: Results from the West Bank, Uganda, and Georgia [1] from USAID ASSIST Project [2] on Vimeo [3].

Lisa Dolan-Branton and Tamar Chitashvili presented on ASSIST’s experience in the West Bank, Uganda, and Georgia in a discussion moderated by Mir Rahimzai. Garance Upham, Vice-President of the World Alliance Against Antibiotic Resistance (WAAAR), provided expert commentary.

**Speakers:**

![mirwais_rahimzai.jpg](mirwais_rahimzai.jpg)  **Moderator:** Mir Rahimzai [5], Regional Director for East Africa, USAID ASSIST Project/URC

![lisa_dolan-branton_sm.jpg](lisa_dolan-branton_sm.jpg)  **Presenter:** Lisa Dolan-Branton, Senior Quality Improvement Advisor, USAID ASSIST Project/URC
Answers to questions posed that could not be addressed during the webinar:

1. Programs like this usually focus on public settings, yet we observe that the private sector is unregulated and therefore abuse antibiotics, do not adhere to basic infection control procedures like separating well patients (like immunization patients) from sick patients (like people with colds and flu). Do you have any experience from the private sector? What challenges did you experience or do you envision if you were to roll this out in the private sector.

Lisa: In the West Bank, the hospitals were from both the public and private sector. We worked as if the health care facilities were one health system for the population across the country. The facilitators and barriers for success in QI are mostly the same although at different degrees of severity depending on staffing and the budget environment. We did find in one private hospital lack of 2nd and 3rd line antibiotics and IPC supplies due to budgetary issues. We documented the issues...
and worked to advocate for the quality of care with their leadership. Using data from the QI project helps leadership to see exactly what is missing from the front lines of the inpatient environment and how those missing supplies and medications impact quality of care. We coached facilities in how to use their data with tools like SBAR (Situation, Background, Assessment, Recommendations) both for clinical communication and leadership advocacy.

**Tamar:** We had extensive experience working with the private sector in Georgia, these were private care providers (village solo practitioners) as well as private health care corporations, owning multiple ambulatory clinics and hospitals throughout the country. We have not faced any serious challenges working with the private sector, although the approaches to design an improvement project and engage them in quality improvement work was different from approaches we used in the public service delivery system (in Uganda for example). Specifically, first, at the design stage, we intently chose a small number of health care facilities owned by two large private corporations EVEX and GeoHospitals, so that project-supported medical facilities could become the “spread agents” for the subsequent waves of improvement in other medical facilities owned by these private networks.

Second, we built an improvement intervention targeted toward rational antibiotic use on intrinsic motivations of the private sector and communicated this intervention as the approach targeted to optimize human and financial resources through streamlining processes and enhancing efficiencies in processes and content of care. As the evidence of our approaches, we routinely shared the results of improvement interventions demonstrating gradual decrease of the use of non-evidence based or unjustified medications and diagnostic tests to treat common childhood conditions along with potential cost savings for payers. This approach resonated well with the corporate objectives of the private care networks in the country to reduce cost of hospital treatment of RTI and its complications.

2. **How was infection control optimally achieved? Were there intensive efforts at educating and monitoring health care providers and local production of the alcohol hand cleaning solutions in the hospitals?**

**Lisa:** In the West Bank, this was done through Intensive education on IPC within the context of a data rich quality improvement project at each hospital supported their implementation of IPC interventions. Quality coordinators collected their own data every month (supported by technical experts) so they learned how to manage and drive change within their facility. IPC and AMR Education was offered during the Collaborative learning activities: interactive in person workshops, web-based weekly sessions, whatsapp groups for Q&A technical assistance, and on-site coaching with technical experts. Alcohol gel was procured by the Palestinian Authority Ministry of Health; each hospital wrote their own tenders based on Department needs.

3. **In order to ensure compliance with the rational drug use protocols one should have strong monitoring system to check the level of antibiotic use in both public and private health facilities, I assume. In Afghanistan where the multi pharmacy and multi prescription is a major issue how one should make sure antimicrobial resistance issues are properly addressed? what tool do you recommend. Dear Dr. Mirwais, you are aware of this issue in Afghanistan; therefore, your addition will also be appreciated.**

**Lisa:** Start in the hospitals with an active antibiotic management program with clinical pharmacists managing all antibiotic prescriptions and start/stop dates. Tools are posted in the links below.

**Tamar:** In Georgia and Uganda, data availability and quality were an integral part of the improvement intervention. In parallel with building clinical capacity in proper assessment, classification and management of common childhood conditions, we supported teams of health care facilities (both in Uganda and Georgia) and district coaches (in Uganda) to generate, collect, routinely analyze, interpret and use clinical and non-clinical data for evidence-based clinical and improvement decisions. For example, along with improving compliance with EB care practices, we supported a) standardization of medical documentation to allow care providers to generate essential clinical information and improved 2) documentation of child’s age, weight, diagnosis/classification and prescription practices to allow regular monitoring (both internal and external) of the progress of
rational prescription practices.

Mir: Thank you. I believe, we have a number of issues to address, AMR in Afghanistan right from the import of the low-quality medicine to improving its prescription by doctors, dispensing by pharmacist and consumption by patients. I remember an old report which showed that, on average, it takes only 13 seconds to dispense medicine to a patient in a private pharmacy. The number of pharmacies in country are many times more than the number of graduated pharmacists. Medicine imported does not have the required potency which leads doctors to overprescribe the dose and add another type of the antibiotics. In summary, I suggest a multipronged approach that ensures 1) quality of the medicine 2) promotion of rational prescription 3) appropriate dispensing and consumption. Engaging the private sector and raising public awareness are other important strategies to ensure rational use of antibiotics and reduce AMR.

4. I see your antibiotic stewardship approach for pediatric RTIs involved both provider skills training and parent education. What, if any, type of work did you do with patient-provider communication surrounding antibiotics? Were communication skills in shared decision making or managing parent expectations addressed?

Tamar: Patient-provider communication surrounding antibiotics was based on 1) counselling (explaining and demonstrating) proper use/administration of antibiotic (dosing, frequency, route, importance of complete treatment and proper dose, and 2) educating parents about the potential harm of administering/using the antibiotics when not necessary.

5. Is the excellent Uganda intervention been scaled up, since so cost effective?

Tamar: We supported scale up through following activities: 1) Through extensive coordination and cross-learning between USAID ASSIST’s core- and field funded activities, successful changes implemented though the core-funded child health activity have been scaled up in additional sites of Northern Uganda, supported by USAID ASSIST field funds. Specifically, 1st line antibiotic prescription practices improved from an initial 54% to 96% from July 2016 to January 2017 in scale up sites and concurrent unjustified antibiotic treatment for diarrhea reduced from 54% to 20% in scale up sites during the same period. Throughout the intervention, we have also carefully documented and compiled a so called “change package”, a document describing the gaps identified, changes tested and implemented, and approaches used to address barriers and the results achieved by supported facilities to improve care of common childhood conditions. An initial version of the package was used to rapidly scale up improvement through USAID ASSIST field funded program. The package can also be helpful for other facility teams in similar settings to improve IMNCI.

Learn more:

This flyer [10] discusses ASSIST’s work to prevent and mitigate AMR in the West Bank, Uganda, and Georgia through the application of improvement strategies.
Strengthening systems to prevent antimicrobial resistance: Results from the West Bank, Uganda, and Georgia

Published on USAID ASSIST Project (https://www.usaidassist.org)

Strengthening Systems to Prevent Antimicrobial Resistance

The global problem of antimicrobial resistance

Antimicrobial resistance is a serious global concern that threatens the effectiveness of many treatments. While it is a complex issue, there are several strategies that can be implemented to prevent and control the emergence of resistant organisms. These strategies include:

1. Strengthening knowledge and awareness
2. Implementing infection control practices
3. Reducing the incidence of infection
4. Utilizing the appropriate use of antimicrobial agents
5. Improving the economic case for sustainable antimicrobial stewardship

The USAID ASSIST Project, through its ASSIST Legacy Webinar Series, has supported the application of improvement strategies to strengthen health systems and service delivery to prevent and mitigate antibiotic-resistant infections (ARIs) in the West Bank, Uganda, and Georgia.

West Bank Improvement Collaborative to Reduce Hospital-Acquired Infections (HAI)

In January 2017, the ASSIST Project in the West Bank partnered with the Ministry of Health to launch an improvement collaborative to build the foundation for a lasting strategy to reduce HAI. The project, which concluded in September 2017, included a 6-month learning network between participating public and private hospitals and national and international experts to apply quality improvement methods to establish reliable processes for infection control and prevention, including training on rational antimicrobial use and detection and treatment of antibiotic-resistant infections. The project also identified best practices and shared them with other hospitals in the region. The collaborative resulted in a reduction of HAI rates and improved the overall quality of care.

Key results:
- A use of time-series-based procedures in the participating hospitals showed a reduction of 40% from February to July 2017.
- There was a 24% decrease in hospital-acquired infections (HAI) measured during the same period, with 77% of hospitals participating performing correct hand hygiene procedures in July compared to a baseline of 45% in May 2017.
- Hospital laboratories strengthened their capacity to identify and identify bacterial samples. In May 2017, 90% of laboratory results included antibiogram testing.

Related resources:


Chitashvili T. Rationale for improving integrated service delivery: reduced cost and improved care in Georgia [14]. Int J Integr Care 2015; WCIC Conf Suppl.


Palestinian Authority Ministry of Health Tools for Active Antibiotic Management and Reduction of Hospital-acquired Infections [17]


West Bank Hospital-Acquired Infections Collaborative Tools [19]

About the ASSIST Legacy Webinar Series [20]

ASSIST will host seven webinars between March and September 2018 to provide an opportunity for participants to learn from results and achievements of the project. The webinars will be held monthly at 9:00-10:00 am EST (Washington, D.C.) and each will address a different topic, drawing on results and learning from multiple countries. They will consist of one or two short presentations, followed by comments and discussion with the moderator and/or expert commentators and audience questions.
Sign up via Eventbrite [21] to receive information about each upcoming webinar.

**Date:** Wednesday, March 28, 2018 - 09:00 to 10:00  
**Location:** Online  
**Organization:** USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project/URC  
**Attachment:**  
- [Flyer: Strengthening Systems to Prevent Antimicrobial Resistance] [22]  
- [Presentation] [23]

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Links
[5] https://www.usaidassist.org/blog/authors/mirwais-rahimzai  
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